

L46 ANSWER 34 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:682106 CAPLUS

DN 119:282106

TI Silver halide color photographic material

IN Nagaoka, Satoshi; Yamanochi, Junichi

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05113645	A2	19930507	JP 1991-302794	19911023
PRAI	JP 1991-302794		19911023		
OS	MARPAT 119:282106				

AB In the title material comprising a support having thereon one or more silver halide emulsion layers, at least one of said emulsion layers contains a magenta dye-forming coupler I. For I, R = H or substituent; Z = nonmetallic atoms for forming a 5-membered azole ring contg. N atoms; further details on said azole ring are given; X = H or group to be released during coupling reaction with an oxidized developing agent. At least one of the silver halide emulsion layers in the title material contains a hydroquinone-contg. polymer (Markush structure given). Compd. II is an example of said polymer. The title material gives excellent color reprodn.

IT **151455-77-5**

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. material contg.)

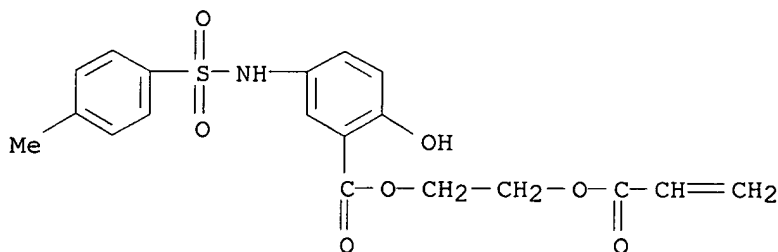
RN 151455-77-5 CAPLUS

CN Benzoic acid, 2-hydroxy-5-[[[4-methylphenyl)sulfonyl]amino]-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate and 2-[(methylsulfonyl)amino]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125128-45-2✓

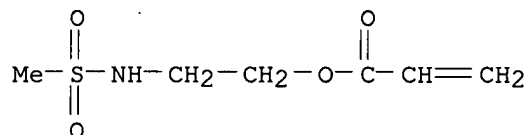
CMF C19 H19 N O7 S



CM 2

CRN 120283-55-8

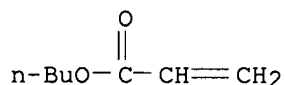
CMF C6 H11 N O4 S



CM 3

CRN 141-32-2

CMF C7 H12 O2



L46 ANSWER 35 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:659389 CAPLUS

DN 119:259389

TI Polymeric scavengers for oxidized developing agents and photographic elements containing the same

IN Yau, Hwei Ling; Nielsen, Ralph Bendt; Thai, Lan Bach

PA Eastman Kodak Co., USA

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 9303421	A1	19930218	WO 1992-US6288	19920730
	W: JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5198517	A	19930330	US 1991-740732	19910806
	EP 598788	A1	19940601	EP 1992-917087	19920730
	EP 598788	B1	19951004		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	JP 06509880	T2	19941102	JP 1992-503704	19920730
	US 5244763	A	19930914	US 1993-3038	19930111
PRAI	US 1991-740732		19910806		
	WO 1992-US6288		19920730		

AB Photog. elements contain polymers having gallic acid or gallic acid deriv. moieties and represented by the general formula I (R1 = H or a group which may be cleaved to a H atom; R2 = H, halogen, or alkyl; L = a linking group) as reducing agents for scavenging oxidized photog. developing agents.

IT 151306-77-3

RL: USES (Uses)

(silver halide color photog. materials contg., as scavenger for oxidized developeps)

RN 151306-77-3 CAPLUS

(19)日本国特許庁(J P)

(12) 公 開 特 許 公 報 (A)

(11)特許出願公開番号

特開平5-113645

(43)公開日 平成5年(1993)5月7日

(51)IntCl<sup>5</sup>

G 0 3 C 7/38

7/392

識別記号

庁内整理番号

F I

技術表示箇所

A

審査請求 未請求 請求項の数1(全 76 頁)

(21)出願番号 特願平3-302794

(22)出願日 平成3年(1991)10月23日

(71)出願人 000005201

富士写真フィルム株式会社

神奈川県南足柄市中沼210番地

(72)発明者 長岡 聡

神奈川県南足柄市中沼210番地 富士写真  
フィルム株式会社内

(72)発明者 山之内 淳一

神奈川県南足柄市中沼210番地 富士写真  
フィルム株式会社内

(74)代理人 弁理士 鈴江 武彦

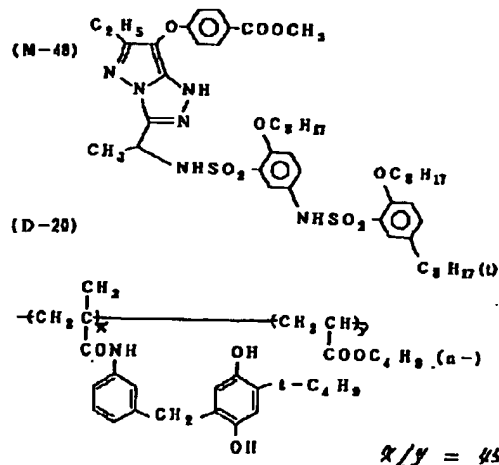
(54)【発明の名称】 ハロゲン化銀カラー写真感光材料

(57)【要約】

【目的】ピラゾロアゾール系マゼンタカプラーを用いたときに生ずる層間混色の増大を防止できると共に経時による写真性能の変化が少なく色再現性に優れたハロゲン化銀カラー写真感光材料を提供する。

【構成】本発明のハロゲン化銀カラー写真感光材料は、支持体上に少なくとも一層のハロゲン化銀乳剤層を有する。ハロゲン化銀カラー写真感光材料を構成する少なくとも一層のハロゲン化銀乳剤層が式(M-48)で表わされるマゼンタ色素形成カプラーを含有し、かつ、少なくとも一層のハロゲン化銀乳剤層に式(D-20)で表わされる化合物を含有する。

【化1】



1

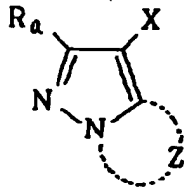
2

## 【特許請求の範囲】

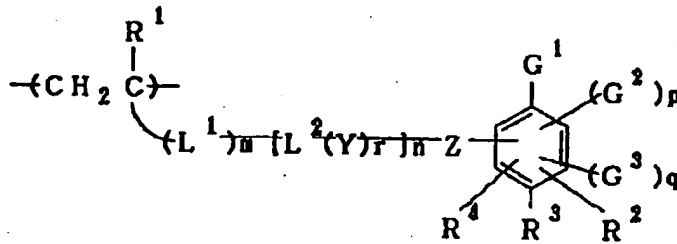
【請求項1】 支持体上に少なくとも一層のハロゲン化銀乳剤層を有するハロゲン化銀カラー写真感光材料において、少なくとも一層の前記ハロゲン化銀乳剤に、化1に示す式〔M〕で表わされるマゼンタ色素形成カプラーを含有し、かつ、少なくとも一層の前記ハロゲン化銀乳剤に、化2に示す式〔A〕で表わされる化合物を含有することを特徴とするハロゲン化銀カラー写真感光材料。

## 【化1】

式〔M〕



式〔A〕



(式中、 $R^1$  は水素原子、アルキル基またはハロゲン原子を示す。 $R^2$ 、 $R^3$ 、 $R^4$  は同じでも異なってもよく、水素原子、ハロゲン原子、シアノ基、スルホ基、カルボキシ基、それぞれ置換もしくは無置換の、アルキル基、アシルアミノ基、アシル基、スルホンアミド基、アルコキシ基、アリーロキシ基、アミノ基、アルキルチオ基、アリールチオ基、カルバモイル基、カルバモイルアミノ基、スルファモイル基、スルファモイルアミノ基、アルコキシカルボニル基、アリーロキシカルボニル基、アルキルスルホニル基、アリールスルホニル基、アルコキシスルホニル基またはアリーロキシスルホニル基を表わし、また、 $R^2$ 、 $R^3$ 、 $R^4$  は隣接する基が縮環して炭素環あるいはヘテロ環を形成しても良い。 $L^1$  は2価の連結基を示す。 $L^2$  は $-\text{SO}_2\text{N}(\text{R}^5)-$ 、 $-\text{CON}(\text{R}^5)-$ 、 $-\text{N}(\text{R}^5)\text{SO}_2-$ 、 $-\text{N}(\text{R}^5)\text{CO}-$ 、 $-\text{N}(\text{R}^5)-$ 、 $-\text{COO}-$ 、 $-\text{OCO}-$ を示し、 $\text{R}^5$  は水素原子またはそれぞれ置換もしくは無置換のアルキル基またはフェニル基を示す。 $Y$ はそれぞれ置換もしくは無置換のアルキレン基、アリーレン基またはアラルキレン基を示す。 $Z$ は、 $-\text{SO}_2\text{N}(\text{R}^5)-$ 、 $-\text{CON}(\text{R}^5)-$ 、 $-\text{N}(\text{R}^5)\text{SO}_2-$ 、 $-\text{N}(\text{R}^5)\text{CO}-$ 、 $-\text{N}(\text{R}^5)-$ 、 $-\text{COO}-$ 、 $-\text{OCO}-$ 、 $-\text{SO}_2-$ 、 $-\text{S}-$ 、 $-\text{O}-$ 、アルキレン基、フェニレン基またはアラルキレン基を表わし、 $\text{R}^5$  は上記※50

\* (式中、 $\text{R}_a$  は水素原子または置換基を表わす。 $Z$ は窒素原子を2~4個含む5員のアゾール環を形成するのに必要な非金属原子群を表わし、該アゾール環は縮合環を含む置換基を有してもよい。 $X$ は水素原子または現像主薬の酸化体とのカップリング反応時に離脱可能な基を表わす。)

【化2】

※と同義である。 $G^1$ 、 $G^2$  はそれぞれ同じでも異なってもよく、水酸基または加水分解で水酸基を生成する基を示す。 $G^3$  はスルホンアミド基またはカルボンアミド基を示す。 $m$ 、 $n$ 、 $p$ 、 $q$ 、 $r$ は0または1を示すが、 $p=1$ のとき $q=0$ であり、 $p=0$ のとき $q=1$ である。)

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】本発明はハロゲン化銀カラー写真感光材料、特に色再現性に優れ、かつ経時安定性に優れたハロゲン化銀カラー写真感光材料に関するものである。

## 【0002】

【従来の技術】ハロゲン化銀カラー写真感光材料においては、高感度化、高画質化のための技術開発は最も重要な課題である。

【0003】このうち、高画質化については、主に粒状性の改良、鮮鋭度の改良、色再現性の改良が進められてきているが、更なる技術の改良が望まれている。

【0004】これらの高画質化のための項目のうち、鮮鋭度の改良については、例えば、乳剤の光散乱を少なくする平板状粒子の導入や、新型DIRカプラーの開発、さらに高発色カプラー、ポリマーカプラーの導入による乳剤層の薄層化、高い反応性をもつ層間混色防止剤の開

\*を、処理時のカラー現像液のpHが高い撮影用カラー反転感光材料に用いたときに生ずる層間混色の増大を防止することにある。

【0010】第二に、経時による写真性能の変化が少ない、色再現性に優れたカラー写真感光材料を提供することにある。

【課題を解決するための手段】本発明は、支持体上に少なくとも一層のハロゲン化銀乳剤層を有するハロゲン化銀カラー写真感光材料において、少なくとも一層の前記ハロゲン化銀乳剤に、化3に示す式〔M〕で表わされるマゼンタ色素形成カプラーを含有し、かつ、少なくとも一層の前記ハロゲン化銀乳剤に、化4に示す式〔A〕で表わされる化合物を含有することを特徴とするハロゲン化銀カラー写真感光材料を提供する。

【化3】

式 (M)

10

【発明が解決しようとする課題】しかしながら、これらのヒラゾロアゾール系マゼンタカブラーを感光材料に導入すると、層間混色が増大し、その結果、色再現性が充分に改良されないという重大な問題があることが明らかとなった。この混色は、混色防止剤の塗布量を増すことにより軽減させることができるが、これに伴い膜厚が増大し、鮮鋭度の劣化を招くことになった。

20

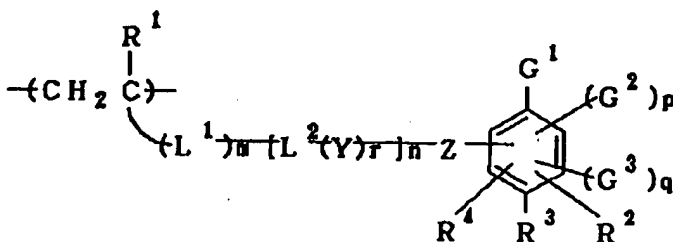
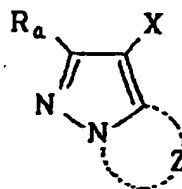
【0009】従って、本発明の目的は、第一のピラゾロアゾール系マゼンタカブラーを用いたときに生ずる層間混色の増大、特にピラゾロアゾール系マゼンタカブラー\*

30

(式中、R<sub>a</sub>は水素原子または置換基を表わす。Zは窒素原子を2～4個含む5員のアゾール環を形成するのに必要な非金属原子群を表わし、該アゾール環は縮合環を含む置換基を有してもよい。Xは水素原子または現像主薬の酸化体とのカップリング反応時に離脱可能な基を表わす。)

【0013】

【化4】



※キルチオ基、アリールチオ基、カルバモイル基、カルバモイルアミノ基、スルファモイル基、スルファモイルアミノ基、アルコキシカルボニル基、アリーロキシカルボニル基、アルキルスルホニル基、アリールスルホニル基、アルコキシスルホニル基またはアリーロキシスルホニル基を表わし、また、 $R^2$ 、 $R^3$ 、 $R^4$  は隣接する基が縮環して炭素環あるいはヘテロ環を形成しても良い。

【0014】 $R^2$ 、 $R^3$ 、 $R^4$  は同じでも異なっているも良く、水素原子、ハロゲン原子、シアノ基、スルホ基、カルボキシル基、それぞれ置換もしくは無置換の、アルキル基、アシルアミノ基、アシル基、スルホンアミド基、アルコキシ基、アリーロキシ基、アミノ基、アル※50

5

【0015】 $L^1$  は2価の連結基を示す。

【0016】 $L^2$  は $-SO_2 N(R^5)-$ 、 $-CON(R^5)-$ 、 $-N(R^5)SO_2-$ 、 $-N(R^5)CO-$ 、 $-N(R^5)-$ 、 $-COO-$ 、 $-OCO-$ を示し、 $R^5$  は水素原子またはそれぞれ置換もしくは無置換のアルキル基またはフェニル基を示す。

【0017】 $Y$ はそれぞれ置換もしくは無置換のアルキレン基、アリーレン基またはアラルキレン基を示す。

【0018】 $Z$ は、 $-SO_2 N(R^5)-$ 、 $-CON(R^5)-$ 、 $-N(R^5)SO_2-$ 、 $-N(R^5)CO-$ 、 $-N(R^5)-$ 、 $-COO-$ 、 $-OCO-$ 、 $-SO_2-$ 、 $-S-$ 、 $-O-$ 、アルキレン基、フェニレン基またはアラルキレン基を表わし、 $R^5$  は上記と同義である。

【0019】 $G^1$ 、 $G^2$  はそれぞれ同じでも異なっているてもよく、水酸基または加水分解で水酸基を生成する基を示す。

【0020】 $G^3$  はスルホンアミド基またはカルボンアミド基を示す。

【0021】 $m$ 、 $n$ 、 $p$ 、 $q$ 、 $r$ は0または1を示すが、 $p=1$ のとき $q=0$ であり、 $p=0$ のとき $q=1$ である。)以下、式[M]で表わされるカブラーについて詳細に説明する。

【0022】式[M]で表わされるカブラー骨格のうち好ましい骨格は1H-イミダゾ[1, 2-b]ピラゾール、1H-ピラゾロ[1, 5-b][1, 2, 4]トリアゾール、1H-ピラゾロ[5, 1-c][1, 2, 4]トリアゾール、1H-ピラゾロ[1, 5-d]テトラゾールおよび1H-ピラゾロ[1, 5-a]ベンズイミダゾールであり、それぞれ後掲の化5に示す式[M-I]、[M-II]、[M-III]、[M-IV]および[M-V]で表わされる。

【0023】これらの式[M-I]～[M-V]における置換基 $R_b$ 、 $R_c$ 、 $R_d$ 、 $R_e$ および $X$ について詳しく説明する。

【0024】 $R_b$  は、水素原子、ハロゲン原子、アルキル基、アリール基、ヘテロ環基、シアノ基、ヒドロキシ基、ニトロ基、カルボキシ基、スルホ基、アミノ基、アルコキシ基、アリーロキシ基、アシルアミノ基、アルキルアミノ基、アニリノ基、ウレイド基、ウレタン基、スルファモイルアミノ基、アルキルチオ基、アリールチオ基、アルコキシカルボニルアミノ基、スルホンアミド基、カルバモイル基、スルファモイル基、スルホニル基、アルコキシカルボニル基、ヘテロ環オキシ基、アゾ基、アシルオキシ基、カルバモイルオキシ基、シリルオキシ基、アリーロキシカルボニルアミノ基、イミド基、ヘテロ環チオ基、スルフィニル基、ホスホニル基、アリーロキシカルボニル基、アシル基、またはアゾリル基を表わし、 $R_b$  は2価の基でビス体を形成しているもよい。

6

【0025】さらに詳しくは、 $R_b$  は各々水素原子、ハロゲン原子(例えば、塩素原子、臭素原子)、アルキル基(例えば、炭素数1～32の直鎖または分岐鎖のアルキル基、アラルキル基、アルケニル基、アルキニル基、シクロアルキル基、シクロアルケニル基で、詳しくは、例えば、メチル、エチル、プロピル、イソプロピル、 $t$ -ブチル、トリデシル、2-メタンスルホニルエチル、3-(3-ペンタデシルフェノキシ)プロピル、3-{4-{2-[4-(4-ヒドロキシフェニルスルホニル)フェノキシ]ドデカンアミド}フェニル}プロピル、2-エトキシトリデシル、トリフルオロメチル、シクロペンチル、3-(2, 4-ジ- $t$ -アミルフェノキシ)プロピル)、アリール基(例えば、フェニル、4- $t$ -ブチルフェニル、2, 4-ジ- $t$ -アミルフェニル、2, 4, 6-トリメチルフェニル、3-トリデカンアミド-2, 4, 6-トリメチルフェニル、4-テトラデカンアミドフェニル)、ヘテロ環基(例えば、2-フリル、2-チエニル、2-ピリミジニル、2-ベンゾチアゾリル)、シアノ基、ヒドロキシ基、ニトロ基、カルボキシ基、スルホ基、アミノ基、アルコキシ基(例えば、メトキシ、エトキシ、2-メトキシエトキシ、2-ドデシルエトキシ、2-メタンスルホニルエトキシ)、アリーロキシ基(例えば、フェノキシ、2-メチルフェノキシ、4- $t$ -ブチルフェノキシ、3-ニトロフェノキシ、3- $t$ -ブチルオキシカルバモイルフェノキシ、3-メトキシカルバモイル)、アシルアミノ基(例えば、アセトアミド、ベンズアミド、テトラデカンアミド、2-(2, 4-ジ- $t$ -アミルフェノキシ)ブタンアミド、4-(3- $t$ -ブチル-4-ヒドロキシフェノキシ)ブタンアミド、2-{4-(4-ヒドロキシフェニルスルホニル)フェノキシ}デカンアミド)、アルキルアミノ基(例えば、メチルアミノ、ブチルアミノ、ドデシルアミノ、ジエチルアミノ、メチルブチルアミノ)、アニリノ基(例えば、フェニルアミノ、2-クロロアニリノ、2-クロロ-5-テトラデカンアミノアニリノ、2-クロロ-5-ドデシルオキシカルボニルアニリノ、 $N$ -アセチルアニリノ、2-クロロ-5-{2-(3- $t$ -ブチル-4-ヒドロキシフェノキシ)ドデカンアミド}アニリノ)、ウレイド基(例えば、フェニルウレイド、メチルウレイド、 $N$ 、 $N$ -ジブチルウレイド)、スルファモイルアミノ基(例えば、 $N$ 、 $N$ -ジプロピルスルファモイルアミノ、 $N$ -メチル- $N$ -デシルスルファモイルアミノ)、アルキルチオ基(例えば、メチルチオ、オクチルチオ、テトラデシルチオ、2-フェノキシエチルチオ、3-フェノキシプロピルチオ、3-(4- $t$ -ブチルフェノキシ)プロピルチオ)、アリールチオ基(例えば、フェニルチオ、2-ブトキシ-5- $t$ -オクチルフェニルチオ、3-ペンタデシルフェニルチオ、2-カルボキシフェニルチオ、4-テトラデカンアミドフェニルチオ)、アルコキシカルボニルアミノ基

(例えば、メトキシカルボニルアミノ、テトラデシルオキシカルボニルアミノ)、スルホンアミド基(例えば、メタンスルホンアミド、ヘキサデカンスルホンアミド、ベンゼンスルホンアミド、p-トルエンスルホンアミド、オクタデカンスルホンアミド、2-メトキシ-5-ヒドロキシベンゼンスルホンアミド)、カルバモイル基(例えば、N-エチルカルバモイル、N、N-ジブチルカルバモイル、N-(2-ドデシルオキシエチル)カルバモイル、N-メチル-N-ドデシルカルバモイル、N-{3-(2,4-ジ-tert-アミルフェノキシ)プロピル}カルバモイル)、スルファモイル基(例えば、N-エチルスルファモイル、N、N-ジプロピルスルファモイル、N-(2-ドデシルオキシエチル)スルファモイル、N-エチル-N-ドデシルスルファモイル、N、N-ジエチルスルファモイル)、スルホニル基(例えば、メタンスルホニル、オクタデカンスルホニル、ベンゼンスルホニル、トルエンスルホニル)、アルコキシカルボニル基(例えば、メトキシカルボニル、ブチルオキシカルボニル、ドデシルオキシカルボニル、オクタデシルオキシカルボニル)、ヘテロ環オキシ基(例えば、1-フェニルテトラゾール-5-オキシ、2-テトラヒドロピラニルオキシ)、アゾ基(例えば、フェニルアゾ、4-メトキシフェニルアゾ、4-ヒバロイルアミノフェニルアゾ、2-ヒドロキシ-4-アロパノイルフェニルアゾ)、アシルオキシ基(例えば、アセトキシ)、カルバモイルオキシ基(例えば、N-メチルカルバモイルオキシ、N-フェニルカルバモイルオキシ)、シリルオキシ基(例えば、トリメチルシリルオキシ、ジブチルメチルシリルオキシ)、アリールオキシカルボニルアミノ基(例えば、フェノキシカルボニルアミノ)、イミド基(例えば、N-スクシンイミド、N-フタルイミド、3-オクタデセニルスクシンイミド)、ヘテロ環チオ基(例えば、2-ベンゾチアゾリルチオ、2,4-ジ-フェノキシ-1,3,5-トリアゾール-6-チオ、2-ピリジルチオ)、スルフィニル基(例えば、ドデカンスルフィニル、3-ペンタデシルフェニルスルフィニル、3-フェノキシプロピルスルフィニル)、ホスホニル基(例えば、フェノキシホスホニル、オクチルオキシホスホニル、フェニルホスホニル)、アリールオキシカルボニル基(例えば、フェノキシカルボニル)、アシル基(例えば、アセチル、3-フェニルプロパノイル、ベンゾイル、4-ドデシルオキシベンゾイル)、アゾリル基(例えば、イミダゾリル、ピラゾリル、3-クロロピラゾール-1-イル、トリアゾリル)を表わす。これらの置換基のうち、更に置換基を有することが可能な基は、炭素原子、酸素原子、窒素原子またはイオウ原子で連結する有機置換基またはハロゲン原子を更に有してもよい。

【0026】これらの置換基のうち、好ましいR<sub>b</sub>としては、アルキル基、アリール基、アルコキシ基、アリ-

ルオキシ基、アルキルチオ基、ウレイド基、ウレタン基、アシルアミノ基を挙げることができる。

【0027】R<sub>c</sub>は、R<sub>b</sub>について例示した置換基と同義の基であり、好ましくは水素原子、アルキル基、アリール基、ヘテロ環基、アルコキシカルボニル基、カルバモイル基、スルファモイル基、スルフィニル基、アシル基、またはシアノ基である。

【0028】R<sub>d</sub>は、R<sub>b</sub>について例示した置換基と同義の基であり、好ましくは水素原子、アルキル基、アリール基、ヘテロ環基、アルコキシ基、アリールオキシ基、アルキルチオ基、アリールチオ基、アルコキシカルボニル基、カルバモイル基、アシル基であり、より好ましくは、アルキル基、アリール基、ヘテロ環基、アルキルチオ基、またはアリールチオ基である。

【0029】またR<sub>e</sub>はR<sub>b</sub>について例示した置換基と同義の基であり、好ましくは、水素原子、アルキル基、アリール基、ヘテロ環基、アルコキシ基、アリールオキシ基、アルコキシカルボニル基、カルバモイル基、スルファモイル基、スルホニル基、アシル基、アシルアミノ基、アルコキシカルボニルアミノ基、スルホンアミド基、スルファモイルアミノ基、またはシアノ基である。

【0030】nは1から4の整数を表わし、好ましくは1から3の整数を表わす。

【0031】Xは水素原子または芳香族1級アミン発色現像主薬の酸化体との反応において離脱可能な基を表わすが、離脱可能な基を詳しく述べれば、例えば、ハロゲン原子、アルコキシ基、アリールオキシ基、アシルオキシ基、アルキルもしくはアリールスルホニルオキシ基、アシルアミノ基、アルキルもしくはアリールスルホンアミド基、アルコキシカルボニルオキシ基、アリールオキシカルボニルオキシ基、アルキル、アリールもしくはヘテロ環チオ基、カルバモイルアミノ基、5員もしくは6員の含窒素ヘテロ環基、イミド基、アリールアゾ基であり、これらの基は更にR<sub>b</sub>の置換基として許容された基で置換されていてもよい。

【0032】さらに詳しくは、例えば、ハロゲン原子(例えば、フッ素原子、塩素原子、臭素原子)、アルコキシ基(例えば、エトキシ、ドデシルオキシ、メトキシエチルカルバモイルメトキシ、カルボキシプロピルオキシ、メチルスルホニルエトキシ、エトキシカルボニルメトキシ)、アリールオキシ基(例えば、4-メチルフェノキシ、4-クロロフェノキシ、4-メトキシフェノキシ、4-カルボキシフェノキシ、3-エトキシカルボニルフェノキシ、4-メトキシカルボニルフェノキシ、3-アセチルアミノフェノキシ、2-カルボキシフェノキシ)、アシルオキシ基(例えば、アセトキシ、テトラデカノイルオキシ、ベンゾイルオキシ)、アルキルもしくはアリールスルホニルオキシ基(例えば、メタンスルホニルオキシ、トルエンスルホニルオキシ)、アシルアミノ基(例えば、ジクロルアセチルアミノ、ヘプタフルオ-

10

20

30

40

50

ロブチリルアミノ)、アルキルもしくはアリールスルホンアミド基(例えば、メタンスルホンアミノ、トリフルオロメタンスルホンアミノ、p-トルエンスルホンアミノ)、アルコキシカルボニルオキシ基(例えば、エトキシカルボニルオキシ、ベンジルオキシカルボニルオキシ)、アリールオキシカルボニルオキシ基(例えば、フェノキシカルボニルオキシ)、アルキル、アリールもしくはヘテロ環チオ基(例えば、ドデシルチオ、1-カルボキシドデシルチオ、フェニルチオ、2-ブトキシ-5-メチロクチルフェニルチオ、2-ベンジルオキシカルボニルアミノフェニルチオ、テトラゾリルチオ)、カルバモイルアミノ基(例えば、N-メチルカルバモイルアミノ、N-フェニルカルバモイルアミノ)、5員もしくは6員の含窒素ヘテロ環基(例えば、1-イミダゾリル、1-ピラゾリル、1, 2, 4-トリアゾール-1-イル、テトラゾリル、3, 5-ジメチル-1-ピラゾリル、4-シアノ-1-ピラゾリル、4-メトキシカルボニル-1-ピラゾリル、4-アセチルアミノ-1-ピラゾリル、1, 2-ジヒドロ-2-オキソ-1-ピリジル)、イミド基(例えば、スクシンイミド、ヒダントニル)、アリールアゾ基(例えば、フェニルアゾ、4-メトキシフェニルアゾ)などある。Xは、これら以外に炭素原子を介して結合した離脱基としてアルデヒド類またはケトン類で4当量カブラーを縮合して得られるビス型カブラーの形を取る場合もある。また、Xは、例えば、現像抑制剤、現像促進剤のような写真的有用基を含んでもよい。好ましいXは、ハロゲン原子、アルコキシ基、アリールオキシ基、アルキルもしくはアリールチオ基、カップリング活性位に窒素原子で結合する5員もしくは6員の含窒素ヘテロ環基であり、特に好ましくは、ハロゲン原子、置換アリールオキシ基、置換アリールチオ基、または置換1-ピラゾリル基である。

【0033】式[M]で表わされるマゼンタカブラーの化合物例を後掲の化6~化34に例示するが、これらに限定されるものではない。

【0034】式[M]で表わされるカブラーの合成法を記載した文献を以下に挙げる。

【0035】式[M-I]の化合物は、例えば、米国特許第4, 500, 630号に、式[M-II]の化合物は、例えば、米国特許第4, 540, 654号、同4, 705, 863号、特開昭61-65245号、同62-209457号、同62-249155号に、式[M-III]の化合物は、例えば、特公昭47-27411号、米国特許第3, 725, 067号に、式[M-IV]の化合物は、例えば、特開昭60-33552号に記載の方法により合成することができる。

【0036】次に、式[A]で表わされる化合物について詳細に説明する。

【0037】式[A]においてL<sup>1</sup>で表わされる連結基は、具体的には、後掲の化35に示す通りである。

【0038】式中、J<sup>1</sup>、J<sup>2</sup>、J<sup>3</sup>は同じでも異なっているてもよく、例えば、-CO-、-SO<sub>2</sub>-、-CON(R<sup>5</sup>)-(R<sup>5</sup>は上記と同義)、-SO<sub>2</sub>-N(R<sup>5</sup>)-(R<sup>5</sup>は上記と同義)、-N(R<sup>5</sup>)CO-(R<sup>5</sup>は上記と同義)、-N(R<sup>5</sup>)SO<sub>2</sub>-(R<sup>5</sup>は上記と同義)、-N(R<sup>5</sup>)R<sup>7</sup>-(R<sup>5</sup>は上記と同義、R<sup>7</sup>は炭素数1~約4のアルキレン基)、-N(R<sup>5</sup>)-R<sup>7</sup>-N(R<sup>8</sup>)-、[R<sup>5</sup>、R<sup>7</sup>は上記と同義、R<sup>8</sup>は水素原子、アルキル基(炭素数1~6)、置換アルキル基(炭素数1~6)を表わす。]、-O-、-S-、-N(R<sup>5</sup>)-CON(R<sup>8</sup>)-(R<sup>5</sup>、R<sup>8</sup>は上記と同義)、-N(R<sup>5</sup>)-SO<sub>2</sub>N(R<sup>8</sup>)-(R<sup>5</sup>、R<sup>8</sup>は上記と同義)、-COO-、-OCO-、-N(R<sup>5</sup>)CO<sub>2</sub>-(R<sup>5</sup>は上記と同義)、-OCON(R<sup>5</sup>)-(R<sup>5</sup>は上記と同義)を挙げることができる。

【0039】X<sup>1</sup>、X<sup>2</sup>およびX<sup>3</sup>は同じでも異なっているてもよく、例えば、アルキレン基、置換アルキレン基、アリーレン基、置換アリーレン基、アラルキレン基、置換アラルキレン基を表わす。e、f、およびgは0または1を表わす。

【0040】式[A]中のR<sup>2</sup>、R<sup>3</sup>、R<sup>4</sup>の置換可能な位置及び上記連結基L<sup>1</sup>に置換されていてもよい置換基の例としては、ハロゲン原子、ニトロ基、シアノ基、アルキル基、置換アルキル基、アルコキシ基、置換アルコキシ基、-NHCOR<sup>9</sup>で表わされる基(R<sup>9</sup>はアルキル基、置換アルキル基、フェニル基、置換フェニル基、アラルキル基、置換アラルキル基を表わす)、-NHSO<sub>2</sub>R<sup>9</sup>(R<sup>9</sup>は上記と同義)、-SOR<sup>9</sup>(R<sup>9</sup>は上記と同義)、-SO<sub>2</sub>R<sup>9</sup>(R<sup>9</sup>は上記と同義)、-COR<sup>9</sup>(R<sup>9</sup>は上記と同義)、-CONR<sup>10</sup>R<sup>11</sup>で表わされる基(R<sup>10</sup>、R<sup>11</sup>は同じでも異なっているてもよく、水素原子、アルキル基、置換アルキル基、フェニル基、置換フェニル基、アラルキル基、置換アラルキル基を表わす)、-SO<sub>2</sub>NR<sup>10</sup>R<sup>11</sup>(R<sup>10</sup>、R<sup>11</sup>は上記と同義)、アミノ基(アルキル基で置換されていてもよい)、水酸基や加水分解して水酸基を形成する基が挙げられる。

【0041】さらに式[A]の置換基中の置換アルキル基、置換アルコキシ基、置換フェニル基、置換アラルキル基及びYで示されるアルキレン、アリーレン、アラルキレン基の置換基の例としては、例えば、水酸基、ニトロ基、炭素数1~約4のアルコキシ基、-NHSO<sub>2</sub>R<sup>9</sup>で表わされる基(R<sup>9</sup>は上記と同義)、-NHCOR<sup>9</sup>で表わされる基(R<sup>9</sup>は上記と同義)、-SO<sub>2</sub>NR<sup>10</sup>R<sup>11</sup>(R<sup>10</sup>、R<sup>11</sup>は上記と同義)、-CONR<sup>10</sup>R<sup>11</sup>で表わされる基(R<sup>10</sup>、R<sup>11</sup>は上記と同義)、-SO<sub>2</sub>R<sup>9</sup>(R<sup>9</sup>は上記と同義)、-COR<sup>9</sup>(R<sup>9</sup>は上記と同義)、ハロゲン原子、シアノ基、アミノ基(アルキル基で置換されていてもよい)が挙げられる。



11

【0042】前記式[A]のうち、好ましい化合物は次の式[B]及び[C]で表わされる。

【0043】式[B]、[C]中の $R^1$ 、 $R^2$ 、 $R^3$ 、 $R^9$ 、 $L^1$ 、 $L^2$ 、Y、Z、m、n、rは上記と同義である。

【0044】前記式[A]のうち特に好ましい化合物は、式[B]、[C]で表わされる化合物のうち、 $R^1$ は水素原子、塩素原子またはメチルであり、 $R^2$ 、 $R^3$ は同じでも異なってもよく、水素原子；塩素原子；シアノ基；スルホ基；カルボキシル基；炭素数1～8の置換もしくは無置換のアルキル基；炭素数1～8の置換もしくは無置換のアルコキシ基；無置換もしくは無置換の炭素数1～8のアルキル基あるいは炭素数6～9のフェニル基で置換されたアミノ基（アルキル基は、単独でまたはヘテロ原子を介して縮環してもよい）；炭素数1～8の置換もしくは無置換のアルキルチオ基；炭素数6～9の置換もしくは無置換のフェニル基、無置換もしくは置換の炭素数1～8のアルキル基で置換されたカルバモイル基またはスルファモイル基（アルキル基単独またはヘテロ原子を介して縮環してもよい）、炭素数1～8の置換もしくは無置換のアルキルまたは炭素数6～9のフェニルスルホニル基；炭素数1～8の置換もしくは無置換のアルキルで置換されたスルホンアミド基またはアシルアミノ基；炭素数6～12の置換もしくは無置換のフェニルで置換されたスルホンアミド基またはアシルアミノ基；炭素数1～8の置換もしくは無置換のアルコキシカルボニル基；炭素数1～8の置換もしくは無置換のアルキルカルボニル基を表わし、 $L_1$ は $-\text{COO}-X^1$ 、 $-\text{CONH}-X^1$ 、 $-\text{SO}_2\text{NH}-X^1$ 、 $-\text{COO}-$ 、 $-\text{CONH}-$ 、 $-\text{SO}_2\text{NH}-$ 、 $-\text{NH}-X^1$ 、 $-\text{NH}-$ 、 $-\text{NHCO}-X^1$ 、 $-\text{NHCO}-$ 、 $-\text{NHSO}_2-X^1$ または $-\text{NHSO}_2-$ を表わし、 $X^1$ は置換または無置換のアルキレン基またはフェニレン基を表わし、 $L_2$ は $-\text{SO}_2\text{NH}-$ 、 $-\text{CONH}-$ 、 $-\text{NHSO}_2-$ 、 $-\text{NHCO}-$ 、 $-\text{COO}-$ 、 $-\text{OCO}-$ 、 $-\text{N}(R^5)-$ を表わし、 $R^5$ は炭素数1～4の置換または無置換のアルキル基を表わし、Yは置換または無置換のアルキレン基またはフェニレン基を表わし、Zは、 $-\text{SO}_2\text{N}(R^5)-$ 、 $-\text{CON}(R^5)-$ 、 $-\text{N}(R^5)\text{SO}_2-$ 、 $-\text{N}(R^5)\text{CO}-$ 、 $-\text{COO}-$ 、 $-\text{OCO}-$ 、アルキレン基、 $-\text{S}-$ 及び $-\text{O}-$ を表わし、 $R^9$ は炭素数6～9の置換もしくは無置換のフェニル基または炭素数1～4のアルキル基を表わし、mは1であり、nは1または0であり、rは1または0を表わす。

【0045】本発明に用いられるマゼンタ色素形成カプラーは緑感性乳剤層に添加することが好ましいが、必要に応じてそれ以外の層に添加しても良い。

【0046】本発明に用いられるマゼンタ色素形成カプラーの添加量は、 $1\text{m}^2$ あたり $1\times 10^{-5}$ ～ $1\times 10^{-2}$

12

mol、好ましくは $1\times 10^{-4}$ ～ $5\times 10^{-3}$ mol、より好ましくは、 $2\times 10^{-4}$ ～ $2\times 10^{-3}$ molである。

【0047】本発明に用いられるポリマー混色防止剤は、一般に、例えば、式[A]の繰返し単位を誘導しうる単量体の単独重合、式[A]の繰返し単位を誘導しうる単量体どうしの共重合、またはこれらの単量体と付加重合しうる他のエチレン性不飽和単量体との共重合によって得られる。

【0048】これらの単量体を重合させる時には、一般的に知られている保護基（例えば、アセチル、メチル、エトキシカルボニル）で前記式[A]で表わされる繰返し単位上の水酸基を保護してから重合を行ってもよい。その場合、重合後に脱保護基反応を行わせることにより式[A]の繰返し単位を得る。

【0049】また、例えば、高分子反応によって結果的に式[A]の繰返し単位を生成せしめる合成法を用いてよい。

【0050】式[A]の繰返し単位を誘導しうる単量体あるいはその先駆体と付加重合しうる他のエチレン性不飽和単量体としては、通常の重合温度（一般的には $10\sim 120^\circ\text{C}$ ）で重合可能な単量体が原則的に使用できる。具体的には、例えば、アクリル酸、 $\alpha$ -クロロアクリル酸、 $\alpha$ -アルキルアクリル酸（例えばメタクリル酸）、これらのアクリル酸類から誘導されるエステルもしくはアミド〔例えばアクリルアミド、メタクリルアミド、n-ブチルアクリルアミド、t-ブチルアクリルアミド、ジアセトンアクリルアミド、メチルアクリレート、エチルアクリレート、n-プロピルアクリレート、n-ブチルアクリレート、t-ブチルアクリレート、iso-ブチルアクリレート、2-エチルヘキシルアクリレート、n-オクチルアクリレート、ラウリルアクリレート、メチルメタクリレート、エチルメタクリレート、n-ブチルメタクリレートおよび $\beta$ -ヒドロキシエチルメタクリレート、 $\beta$ -スルホンアミドエチルアクリレート、 $\beta$ -カルボンアミドエチルアクリレート、 $\beta$ -アルコキシエチルアクリレート（アルコキシ基はさらに複数の置換アルコキシ基を含むものもある）、 $\beta$ -アルコキシエチルアクリルアミド（同上）、 $\beta$ -スルホンアミドエチルアクリルアミド、 $\beta$ -カルボンアミドエチルアクリルアミド、 $\beta$ -スルホンアミドエチルメタクリレート、 $\beta$ -アルコキシエチルメタクリレート（同上）、 $\beta$ -アルコキシエチルメタクリルアミド（同上）〕、ビニルエステル（例えば、ビニルアセテート、ビニルプロピオネートおよびビニルラウレート）、アクリロニトリル、メタクリロニトリル、芳香族ビニル化合物（例えば、スチレンおよびその誘導体、例えば、ビニルトルエン、ジビニルベンゼン、ビニルアセトフェノンおよびスルホスチレン）、イタコン酸、シトラコン酸、クロトン酸、ビニリデンクロライド、ビニルアルキルエーテル（例えばビニルエチルエーテル）、マレイン酸エステ

ル、N-ビニル-2-ピロリドン、N-ビニルピリジン、2-および4-ビニルピリジン又は、後掲の化37に示す単量体が挙げられるがこれに限定されるものではない。

【0051】本発明のハロゲン化銀カラー写真感光材料において、前記式[A]の繰返し単位を有しないエチレン性不飽和単量体と式[A]の繰返し単位を有するエチレン性不飽和単量体との共重合体を用いる場合、式[A]で表わされる繰返し単位の含有量は少なくとも10モル%が好ましい。

【0052】本発明において用いられるポリマー混色防止剤は、通常、平均重合度5~5000の重合体が好ましい。本発明のポリマー混色防止剤の総添加量は、 $1 \times 10^{-4} \sim 3.0 \text{ g/m}^2$ 、好ましくは $5 \times 10^{-4} \sim 2.0 \text{ g/m}^2$ 、より好ましくは $1 \times 10^{-3} \sim 1.5 \text{ g/m}^2$ である。

【0053】本発明におけるポリマー混色防止剤の式[A]に相当する部分の具体例を後掲の化38~化49に示すが、本発明はこれらに限定されるものではない。

【0054】本発明における混色防止能を有するポリマーの好ましい化合物について後掲の表1~3に例示するが、本発明がこれに限定されるものではない。

【0055】例えば、本発明における混色防止能を有するポリマーの具体例や合成法に関しては、上記のものを含め、例えば、特開昭61-169844号、特開平1-134448号、同1-134449号、同1-136149号、同1-198742号、米国特許2710\*

#### 第3層：中間層

表面及び内部をかぶらせた微粒子沃臭化銀乳剤（平均粒径0.06 $\mu\text{m}$ 、変動係数18%、AgI含量1モル%）

#### ゼラチン

#### 【0061】第4層：低感度赤感性乳剤層

乳剤A	銀量	0.1 g
乳剤B	銀量	0.4 g
ゼラチン		0.8 g
カプラーC-1		0.15 g
カプラーC-2		0.05 g
カプラーC-3		0.05 g
カプラーC-8		0.05 g
化合物Cpd-C		10 mg
高沸点有機溶媒Oil-2		0.1 g
添加物P-1		0.1 g.

#### 【0062】第5層：中感度赤感性乳剤層

乳剤B	銀量	0.2 g
乳剤C	銀量	0.3 g
ゼラチン		0.8 g
カプラーC-1		0.2 g
カプラーC-2		0.05 g
カプラーC-3		0.2 g

\*801号、同2816028号に記載されている。

#### 【0056】

#### 【実施例】

（実施例）以下、本発明を実施例によって具体的に説明するがこれに限定されるものではない。

#### 【0057】試料101の作製

下塗りを施した厚み127 $\mu\text{m}$ の三酢酸セルロースフィルム支持体上に、下記の組成の各層より成る多層カラー感光材料を作製し、試料101とした。数字は $\text{m}^2$ 当りの添加量を表わす。なお添加した化合物の効果は記載した用途に限らない。

#### 【0058】第1層：ハレーション防止層

黒色コロイド銀	銀量	0.20 g
ゼラチン		1.9 g
紫外線吸収剤U-1		0.1 g
紫外線吸収剤U-3		0.04 g
紫外線吸収剤U-4		0.1 g
高沸点有機溶媒Oil-1		0.1 g
染料E-1の微結晶固体分散物		0.1 g.

#### 【0059】第2層：中間層

ゼラチン		0.40 g
化合物Cpd-C		5 mg
化合物Cpd-J		5 mg
化合物Cpd-K		3 mg
高沸点有機溶媒Oil-3		0.1 g
染料D-4		0.4mg.

#### 【0060】

銀量	0.05 g
	0.4 g.

※高沸点有機溶媒Oil-2	0.1 g
添加物P-1	0.1 g.

#### 【0063】第6層：高感度赤感性乳剤層

乳剤D	銀量	0.4 g
ゼラチン		1.1 g
カプラーC-1		0.3 g
カプラーC-2		0.1 g
カプラーC-3		0.7 g
添加物P-1		0.1 g.

#### 【0064】第7層：中間層

ゼラチン		0.6 g
添加物M-1		0.3 g
混色防止剤Cpd-I		2.6 mg
紫外線吸収剤U-1		0.01 g
紫外線吸収剤U-2		0.002 g
紫外線吸収剤U-5		0.01 g
染料D-1		0.02 g
化合物Cpd-C		5 mg

15

16

化合物Cpd-J	5 mg	* 高沸点有機溶媒Oil-1	0.02g.
化合物Cpd-K	3 mg	* 【0065】	

## 第8層：中間層

表面及び内部をかぶらせた沃臭化銀乳剤（平均粒径0.06 $\mu$ m、

変動係数16%、AgI含量0.3モル%）

	銀量	0.02g
ゼラチン		1.0g
添加物P-1		0.2g
混色防止剤Cpd-A		0.1g.

## 【0066】第9層：低感度緑感性乳剤層

10※高沸点有機溶媒Oil-2 0.02g.

乳剤E	銀量	0.1g	【0069】第12層：中間層	
乳剤F	銀量	0.2g	ゼラチン	0.6g.
乳剤G	銀量	0.2g	【0070】第13層：イエローフィルター層	
ゼラチン		0.5g	黄色コロイド銀	銀量 0.07g
カブラーC-4		0.15g	ゼラチン	1.1g
カブラーC-7		0.15g	混色防止剤Cpd-A	0.01g
化合物Cpd-B		0.03g	高沸点有機溶媒Oil-1	0.01g
化合物Cpd-C	10 mg		染料E-2の微結晶固体分散物	0.05g.
化合物Cpd-D	0.02g		【0071】第14層：中間層	
化合物Cpd-E	0.02g	20	ゼラチン	0.6g.
化合物Cpd-F	0.02g		【0072】第15層：低感度青感性乳剤層	
化合物Cpd-G	0.02g		乳剤J	銀量 0.2g
高沸点有機溶媒Oil-1	0.1g		乳剤K	銀量 0.3g
高沸点有機溶媒Oil-2	0.1g.		乳剤L	銀量 0.1g

## 【0067】第10層：中感度緑感性乳剤層

乳剤G	銀量	0.3g	ゼラチン	0.8g
乳剤H	銀量	0.1g	カブラーC-5	0.2g
ゼラチン		0.6g	カブラーC-6	0.1g
カブラーC-4		0.2g	カブラーC-9	0.4g.
カブラーC-7		0.2g	【0073】第16層：中感度青感性乳剤層	
化合物Cpd-B		0.03g	乳剤L	銀量 0.1g
化合物Cpd-D		0.02g	乳剤M	銀量 0.4g
化合物Cpd-E		0.02g	ゼラチン	0.9g
化合物Cpd-F		0.05g	カブラーC-5	0.3g
化合物Cpd-G		0.05g	カブラーC-6	0.1g
高沸点有機溶媒Oil-2	0.01g.		カブラーC-9	0.1g.

## 【0068】第11層：高感度緑感性乳剤層

乳剤I	銀量	0.5g	【0074】第17層：高感度青感性乳剤層	
ゼラチン		1.0g	乳剤N	銀量 0.4g
カブラーC-4		0.3g	ゼラチン	1.2g
カブラーC-7		0.2g	カブラーC-5	0.3g
化合物Cpd-B		0.08g	カブラーC-6	0.6g
化合物Cpd-C	5 mg		カブラーC-9	0.1g.
化合物Cpd-D	0.02g	40	【0075】第18層：第1保護層	
化合物Cpd-E	0.02g		ゼラチン	0.7g
化合物Cpd-F	0.02g		紫外線吸収剤U-1	0.2g
化合物Cpd-G	0.02g		紫外線吸収剤U-2	0.05g
化合物Cpd-J	5 mg		紫外線吸収剤U-5	0.3g
化合物Cpd-K	5 mg		ホルマリンスカベンジャー	
高沸点有機溶媒Oil-1	0.02g	※50	Cpd-H	0.4g
			染料D-1	0.1g
			染料D-2	0.05g

17

18

染料D-3

0.1 g. \* \* 【0076】

第19層：第2保護層

コロイド銀 銀量 0.1 mg  
 微粒子沃臭化銀乳剤（平均粒径0.06 $\mu$ m、AgI含量1モル%）  
 銀量 0.1 g  
 ゼラチン 0.4 g.

【0077】

第20層：第3保護層

ゼラチン 0.4 g  
 ポリメチルメタクリレート（平均粒径1.5 $\mu$ m）  
 0.1 g  
 メチルメタクリレートとアクリル酸のモル比が4：6である  
 これらの共重合体  
 （平均粒径1.5 $\mu$ m） 0.1 g  
 シリコンオイル 0.03 g  
 界面活性剤W-1 3.0 mg.

【0078】また、すべての乳剤層には上記組成物の他に添加剤F-1～F-8を添加した。さらに各層には上記組成物の他にゼラチン硬化剤H-1及び塗布用、乳化用界面活性剤W-2、W-3、W-4を添加した。  
 【0079】更に防腐、防黴剤としてフェノール、1,2-ベンズイソチアゾリン-3-オン、2-フェノキシエタノール、フェネチルアルコール、p-安息香酸ブチ※

※ルエステルを添加した。

【0080】上記組成物に用いた各成分の構造式を後掲の化50～化63に示す。

20 【0081】試料101に用いた沃臭化銀乳剤は以下のとおりである。

【0082】

乳剤名	粒子の特徴	球相当		
		平均粒径 ( $\mu$ m)	変動係数 (%)	AgI含率 (%)
A	単分散14面体粒子	0.28	16	4
B	単分散立方体内部潜像型粒子	0.30	10	4
C	単分散平板状粒子, 平均アスペクト比4.0	0.38	18	3
D	平板状粒子, 平均アスペクト比8.0	0.68	25	2
E	単分散立方体粒子	0.20	17	4
F	単分散立方体粒子	0.23	16	4
G	単分散立方体内部潜像型粒子	0.28	11	4
H	単分散立方体内部潜像型粒子	0.32	9	3
I	平板状粒子, 平均アスペクト比9.0	0.80	28	2
J	単分散14面体粒子	0.30	18	4
K	単分散平板状粒子, 平均アスペクト比7.0	0.45	17	4
L	単分散立方体内部潜像型粒子	0.46	14	4
M	単分散平板状粒子, 平均アスペクト比10.0	0.55	13	3
N	平板状粒子, 平均アスペクト比12.0	1.00	33	2

また、乳剤A～Nの分光増感は以下のとおりである。 ★ ★ 【0083】

乳剤名	添加した増感色素	ハロゲン化銀1 mol 当たりの添加量 (g)
A	S-1	0.025

19

20

	S-2	0.25
	S-7	0.01
B	S-1	0.01
	S-2	0.25
	S-7	0.01
C	S-1	0.02
	S-2	0.25
	S-7	0.01
D	S-1	0.01
	S-2	0.10
	S-7	0.01
E	S-3	0.5
	S-4	0.1
F	S-3	0.3
	S-4	0.1
G	S-3	0.25
	S-4	0.08
	S-8	0.05
H	S-3	0.2
	S-4	0.06
	S-8	0.05
I	S-3	0.3
	S-4	0.07
	S-8	0.1
J	S-6	0.2
	S-5	0.05
K	S-6	0.2
	S-5	0.05
L	S-6	0.22
	S-5	0.06
M	S-6	0.15
	S-5	0.04
N	S-6	0.22
	S-5	0.06

試料101の第9層から第11層に添加したマゼンタカブラーC-4、C-7のかわりに本発明のマゼンタカブラーを試料101の総モル数の0.7倍モルで置き換えることと、これに加えて、さらに第8層に添加した混色防止剤Cpd-Aのかわりに、本発明の混色防止剤を等重量で置き換える以外は試料101と同様にして、試料102~113を作製した。使用した具体的化合物は後掲の表4に示した。

【0084】このようにして得られた試料101~113をストリップ形態に裁断後、緑フィルターを通して露光を行なった。その後、下記に示す処理を施した後、濃度測定を行なった。混色の評価は、緑フィルターで測定した時の最低濃度の値を比較することにより行なった。得られた結果を表4に示した。

【0085】次に、試料101~113を45℃、80%RHの条件下にて5日間保存した。その後、常法にて\*50

\*ウエッジ露光を与え、室温にて保存しておいた試料と共に前述と同じ処理を施し、写真性特性の変化を調べた。この結果を表4に併記した。

#### 【0086】[処理工程]

処理工程	時間	温度
第一現像	6分	38℃
水 洗	2分	38℃
反 転	2分	38℃
発色現像	6分	38℃
調 整	2分	38℃
漂 白	6分	38℃
定 着	4分	38℃
水 洗	4分	38℃
安 定	1分	25℃。

【0087】各処理液の組成は以下の通りであった。

#### 【0088】

21

## 〔第一現像液〕

ニトリロ-N, N, N-トリメチレンホスホン酸・5ナトリウム塩

1.5 g

ジエチレントリアミン五酢酸・5ナトリウム塩

2.0 g

亜硫酸ナトリウム

30 g

ハイドロキノン・モノスルホン酸カリウム

20 g

炭酸カリウム

15 g

重炭酸ナトリウム

12 g

1-フェニル-4-メチル-4-ヒドロキシメチル-3-ピラゾリドン

1.5 g

臭化カリウム

2.5 g

チオシアン酸カリウム

1.2 g

ヨウ化カリウム

2.0 g

ジエチレングリコール

13 g

水を加えて

1000ミリリットル

pH

9.60

pHは塩酸又は水酸化カリウムで調整した。

【0089】

20

## 〔反転液〕

ニトリロ-N, N, N-トリメチレンホスホン酸・5ナトリウム塩

3.0 g

塩化第一スズ・2水塩

1.0 g

p-アミノフェノール

0.1 g

水酸化ナトリウム

8 g

氷酢酸

15ミリリットル

水を加えて

1000ミリリットル

pH

6.00

pHは塩酸又は水酸化カリウムで調整した。

【0090】

## 〔発色現像液〕

ニトリロ-N, N, N-トリメチレンホスホン酸・5ナトリウム塩

2.0 g

亜硫酸ナトリウム

7.0 g

リン酸三ナトリウム・12水塩

36 g

臭化カリウム

1.0 g

ヨウ化カリウム

90 g

水酸化ナトリウム

3.0 g

シトラジン酸

1.5 g

N-エチル-N-(β-メタンスルホンアミドエチル)-3-メチル-

4-アミノアニリン・3/2硫酸・1水塩

11 g

3,6-ジチアオクタン-1,8-ジオール

1.0 g

水を加えて

1000ミリリットル

pH

11.80

pHは塩酸又は水酸化カリウムで調整した。

【0091】

## 〔調整液〕

23

24

エチレンジアミン4酢酸・2ナトリウム塩・2水塩

8.0 g

亜硫酸ナトリウム

12 g

1-チオグリセロール

0.4 g

ホルムアルデヒド重亜硫酸ナトリウム付加物

30 g

水を加えて

1000ミリリットル

pH

6.20

pHは塩酸又は水酸化ナトリウムで調整した。

【0092】

10

[漂白液]

エチレンジアミン4酢酸・2ナトリウム塩・2水塩

2.0 g

エチレンジアミン4酢酸・Fe(III)・アンモニウム・2水塩

120 g

臭化カリウム

100 g

硝酸アンモニウム

10 g

水を加えて

1000ミリリットル

pH

5.70

pHは塩酸又は水酸化ナトリウムで調整した。

【0093】

[定着液]

チオ硫酸アンモニウム

80 g

亜硫酸ナトリウム

5.0 g

重亜硫酸ナトリウム

5.0 g

水を加えて

1000ミリリットル

pH

6.60

pHは塩酸又はアンモニア水で調整した。

【0094】

[安定液]

ベンゾイソチアゾリン-3-オン

0.02 g

ポリオキシエチレン-p-モノノニルフェニルエーテル

(平均重合度10)

0.3 g

水を加えて

1000ミリリットル

pH

7.0.

【0095】表4より明らかなように、本発明のマゼン  
タカブラーを用いると、本発明以外の混色防止剤では層  
間混色が増大し、かつ、高温高湿条件下で保存した時に  
階調の軟調化を招く。これに対して、本発明の混色防止  
剤を用いると、層間混色は減少し、かつ、高温高湿条件  
下で保存した場合の階調の軟調化も認められない。又、  
色再現性も良好であった。

\*実施例2

実施例1にて作製した試料101~113について、処  
理工程を以下に示す過酷条件に変更する以外は、実施例  
1と同様の操作を繰り返し、実施例1と同様の結果を得  
た。

【0096】

\*

[処理工程]

処理工程	時間	温度	タンク容量	補充量
第一現像	6分	38℃	12リットル	2200ミリリットル/m <sup>2</sup>
第一水洗	2分	38℃	4リットル	7500ミリリットル/m <sup>2</sup>
反転	2分	38℃	4リットル	1100ミリリットル/m <sup>2</sup>
発色現像	6分	38℃	12リットル	2200ミリリットル/m <sup>2</sup>
調整	2分	38℃	4リットル	1100ミリリットル/m <sup>2</sup>
漂白	6分	38℃	12リットル	220ミリリットル/m <sup>2</sup>

25			26	
定 着	4分	38℃	8リットル	1100ミリリットル/m <sup>2</sup>
第二水洗	4分	38℃	8リットル	7500ミリリットル/m <sup>2</sup>
安 定	1分	25℃	2リットル	1100ミリリットル/m <sup>2</sup>

【0097】各処理液の組成は以下の通りであった。 \* \* 【0098】

[第一現像液]	[タンク液]	[補充液]
ニトリロー-N, N, N-トリメチレンホスホン酸・5ナトリウム塩		
	1.5 g	1.5 g
ジエチレントリアミン五酢酸・5ナトリウム塩		
	2.0 g	2.0 g
亜硫酸ナトリウム	30 g	30 g
ハイドロキノン・モノスルホン酸カリウム		
	20 g	20 g
炭酸カリウム	15 g	20 g
重炭酸ナトリウム	12 g	15 g
1-フェニル-4-メチル-4-ヒドロキシメチル-3-ピラゾリドン		
	1.5 g	2.0 g
臭化カリウム	2.5 g	1.4 g
チオシアン酸カリウム	1.2 g	1.2 g
ヨウ化カリウム	2.0 mg	—
ジエチレングリコール	13 g	15 g
水を加えて	1000ミリリットル	1000ミリリットル
pH	9.60	9.60

pHは塩酸又は水酸化カリウムで調整した。

【0099】

[反転液]	[タンク液]	[補充液]
ニトリロー-N, N, N-トリメチレンホスホン酸・5ナトリウム塩		
	3.0 g	タンク液に同じ
塩化第一スズ・2水塩	1.0 g	
p-アミノフェノール	0.1 g	
水酸化ナトリウム	8 g	
氷酢酸	15ミリリットル	
水を加えて	1000ミリリットル	
pH	6.00	

pHは塩酸又は水酸化ナトリウムで調整した。

【0100】

[発色現像液]	[タンク液]	[補充液]
ニトリロー-N, N, N-トリメチレンホスホン酸・5ナトリウム塩		
	2.0 g	2.0 g
亜硫酸ナトリウム	7.0 g	7.0 g
リン酸三ナトリウム・12水塩	36 g	36 g
臭化カリウム	1.0 g	—
ヨウ化カリウム	90 mg	—
水酸化ナトリウム	3.0 g	3.0 g
シトラジン酸	1.5 g	1.5 g
N-エチル-N-(β-メタンスルホンアミドエチル)-3-メチル-4-アミノアニリン・3/2硫酸・1水塩		
	11 g	11 g
3,6-ジチアオクタン-1,8-ジオール		
	1.0 g	1.0 g
水を加えて	1000ミリリットル	1000ミリリットル



27 28

pH 11.80 12.00

pHは塩酸又は水酸化カリウムで調整した。

# 【0101】

[調整液]	[タンク液]	[補充液]
エチレンジアミン4酢酸・2ナトリウム塩・2水塩		
	8.0g	8.0g
亜硫酸ナトリウム	12g	12g
1-チオグリセロール	0.4g	0.4g
ホルムアルデヒド重亜硫酸ナトリウム付加物		
	30g	35g
水を加えて	1000ミリリットル	1000ミリリットル
pH	6.30	6.10

pHは塩酸又は水酸化ナトリウムで調整した。

# 【0102】

[漂白液]	[タンク液]	[補充液]
エチレンジアミン4酢酸・2ナトリウム塩・2水塩		
	2.0g	4.0g
エチレンジアミン4酢酸・Fe(III)・アンモニウム・2水塩		
	120g	240g
臭化カリウム	100g	200g
硝酸アンモニウム	10g	20g
水を加えて	1000ミリリットル	1000ミリリットル
pH	5.70	5.50

pHは塩酸又は水酸化ナトリウムで調整した。

# 【0103】

[定着液]	[タンク液]	[補充液]
チオ硫酸アンモニウム	80g	タンク液に同じ
亜硫酸ナトリウム	5.0g	
重亜硫酸ナトリウム	5.0g	
水を加えて	1000ミリリットル	
pH	6.60	

pHは塩酸又はアンモニア水で調整した。

# 【0104】

[安定液]	[タンク液]	[補充液]
ベンゾイソチアゾリン-3-オン	0.02g	0.03g
ポリオキシエチレン-p-モノニルフェニルエーテル (平均重合度10)	0.3g	0.3g
水を加えて	1000ミリリットル	1000ミリリットル
pH	7.0	7.0

# 【0105】

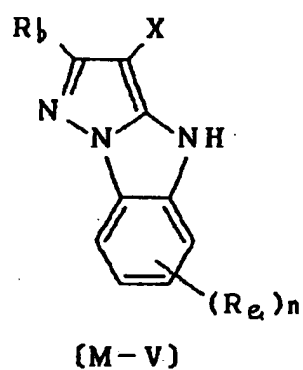
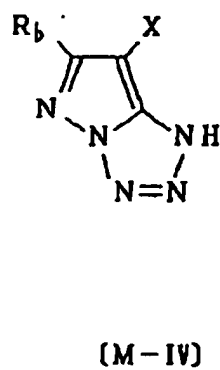
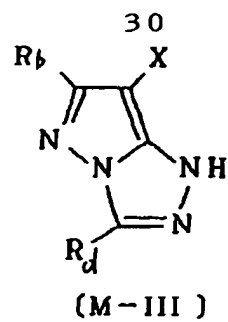
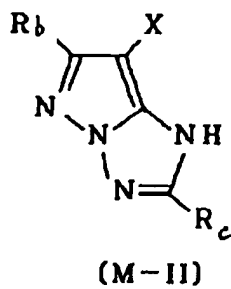
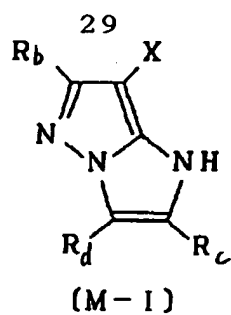
【発明の効果】本発明のハロゲン化銀カラー写真感光材料によれば、ピラゾロアゾール系マゼンタカプラーを用いたときに生ずる層間混色の増大、特にピラゾロアゾール系マゼンタカプラーを、処理時のカラー現像液のpHが高い、撮影用カラー反転感光材料に用いたときに生ずる\*

40\*層間混色の増大を防止することができると共に、経時による写真性能の変化を低減し、かつ、色再現性を大幅に改善することができる等顕著な効果を奏する。

# 【0106】

【化5】

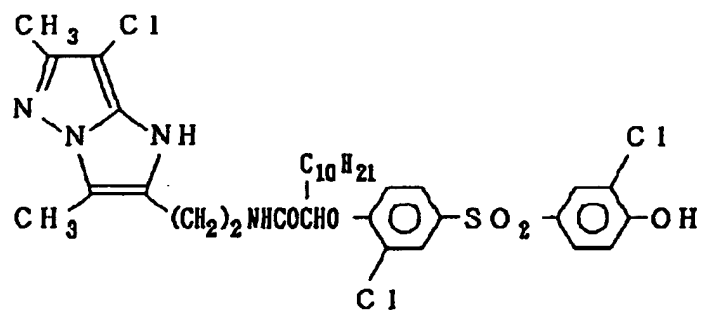
(16)



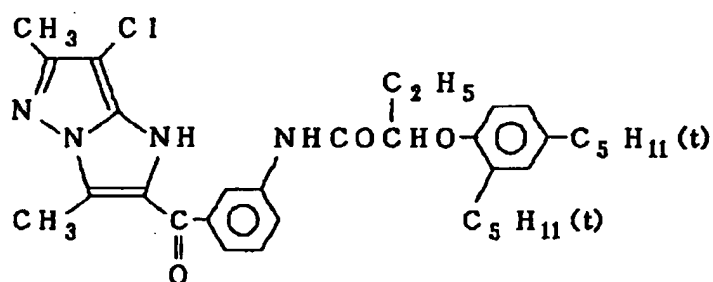
【0107】

\* \* 【化6】

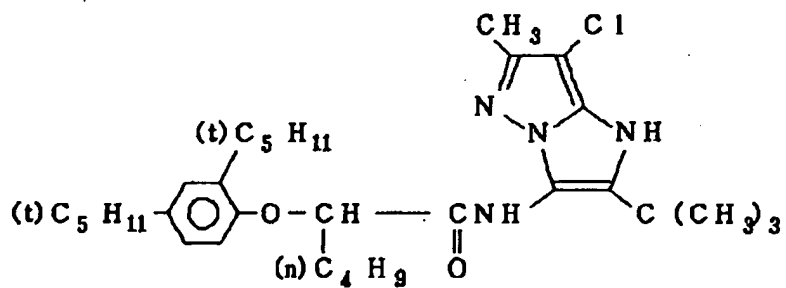
(M-1)



(M-2)



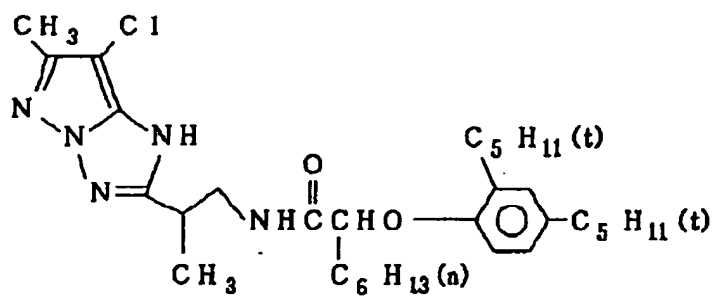
(M-3)



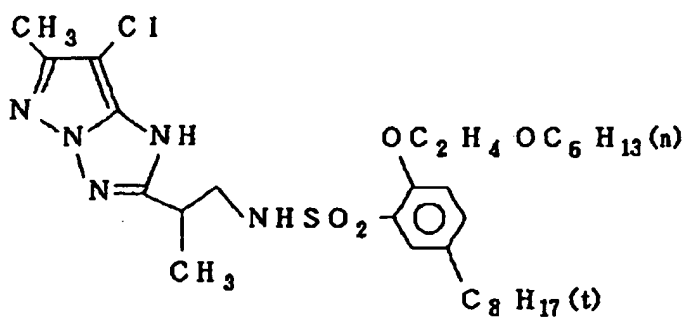
【0108】

\* \* 【化7】

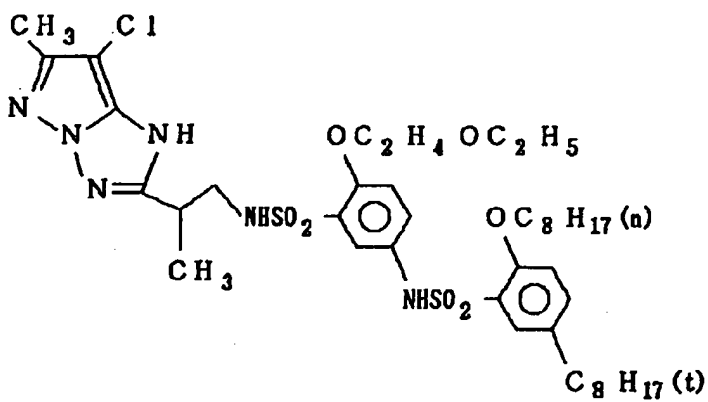
33  
(M-4)



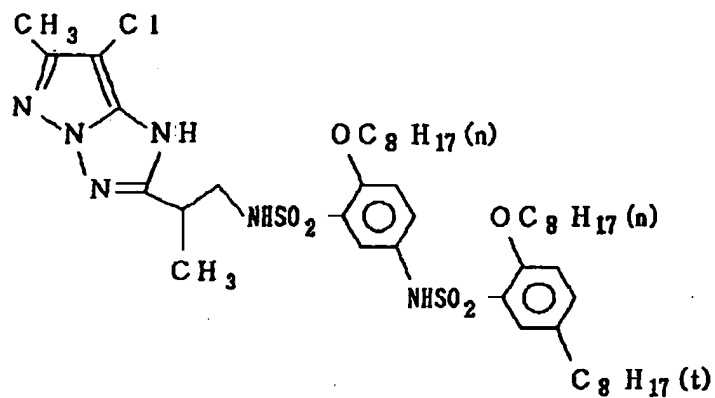
(M-5)



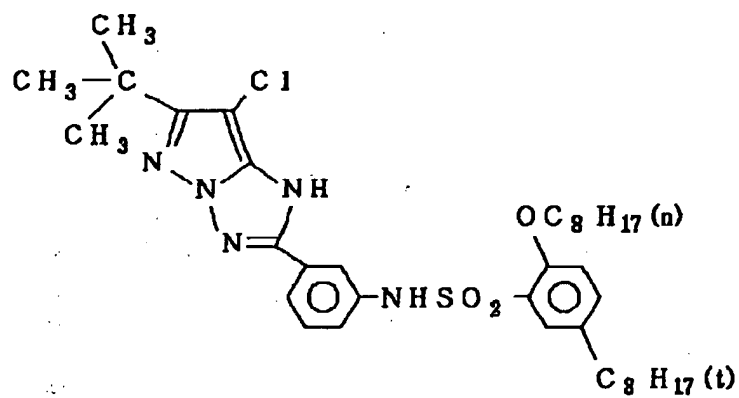
(M-6)



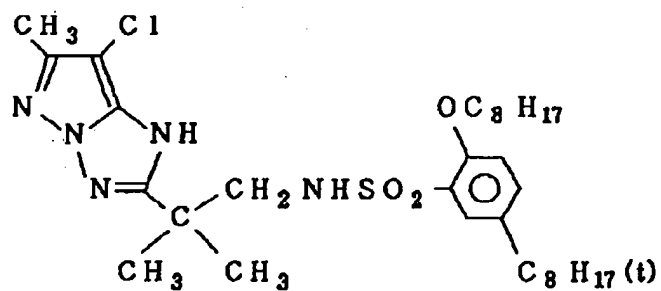
(M-7)



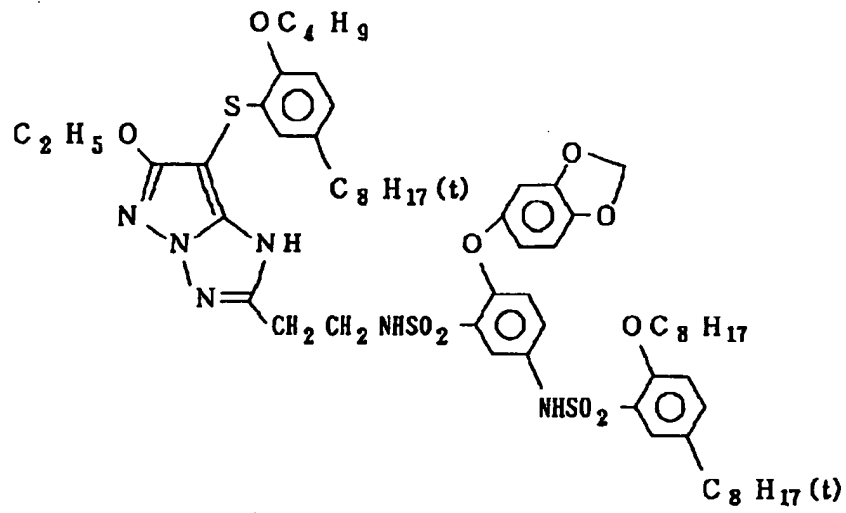
(M-8)



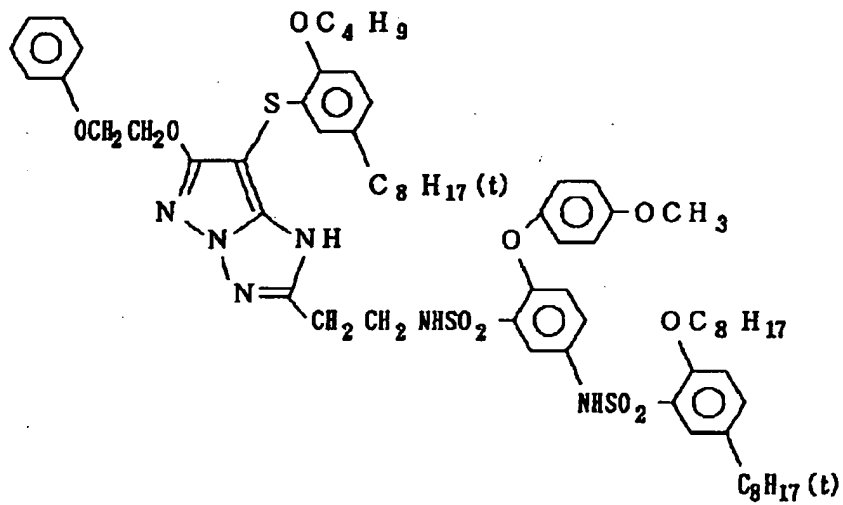
(M-9)



38



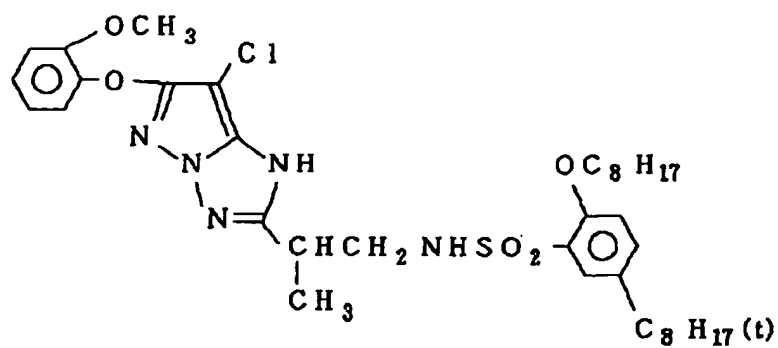
(M- 1 1)



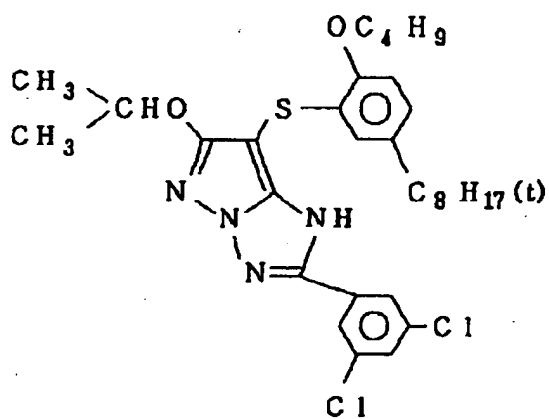
**【0 1 1 1】**

\* \* 【化10】

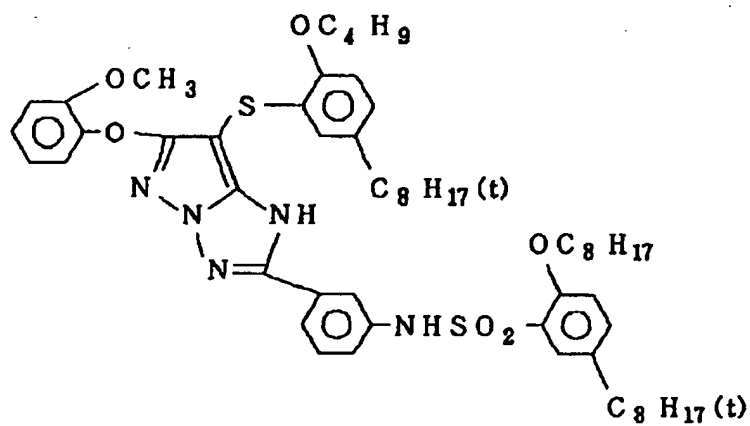
39  
(M-12)



(M-13)



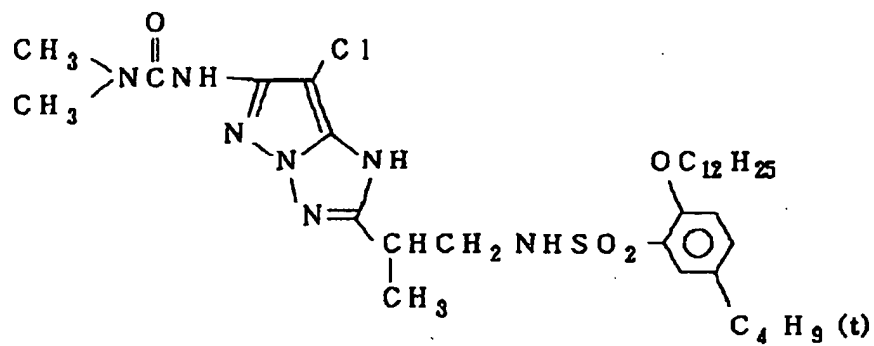
(M-14)



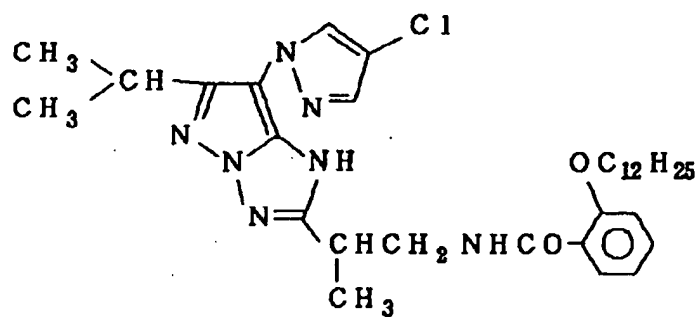
【0112】

\* \* 【化11】

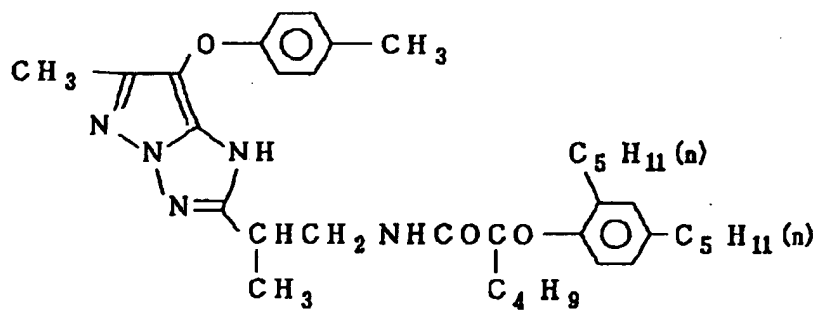
(M-15)



(M-16)



(M-17)



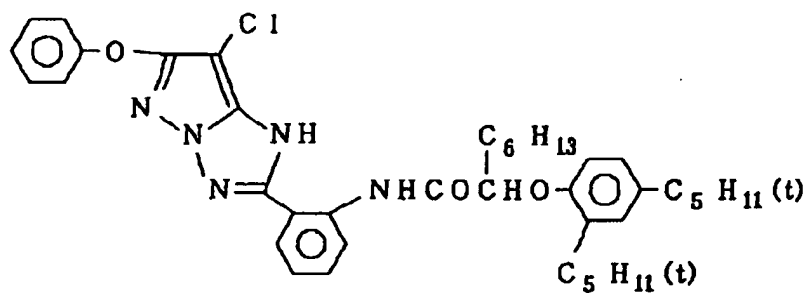
【0113】

\* \* 【化12】

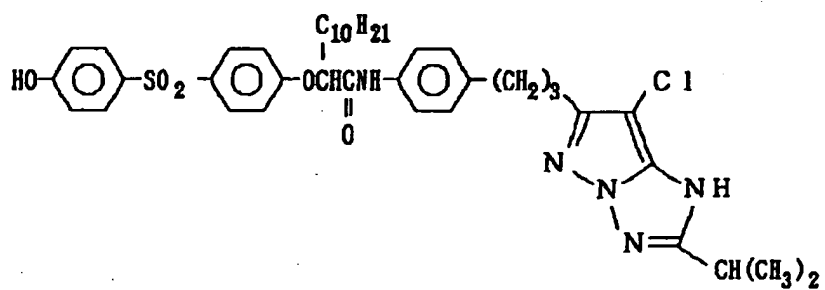


<sup>43</sup>  
(M-18)

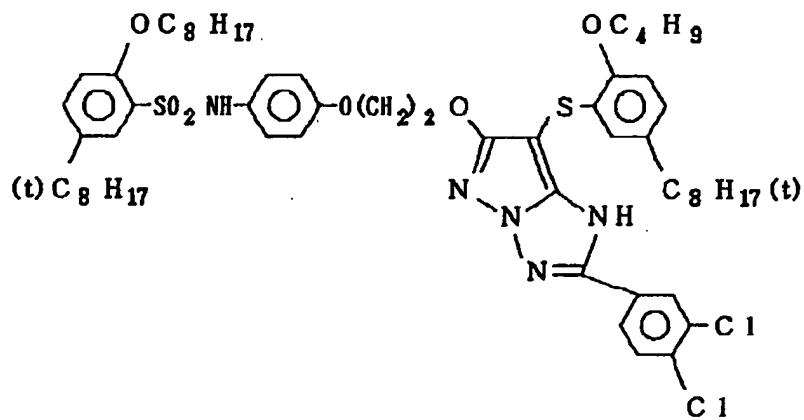
44



(M-19)



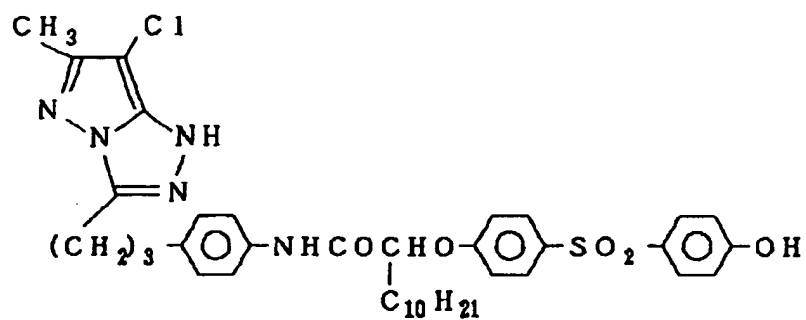
(M-20)



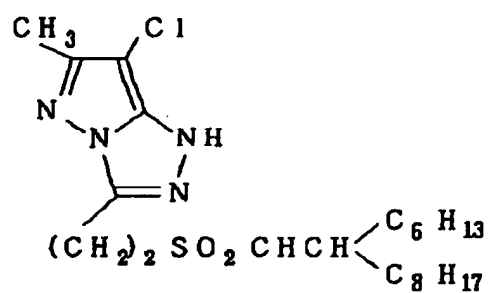
[0114]

\* \* 【化13】

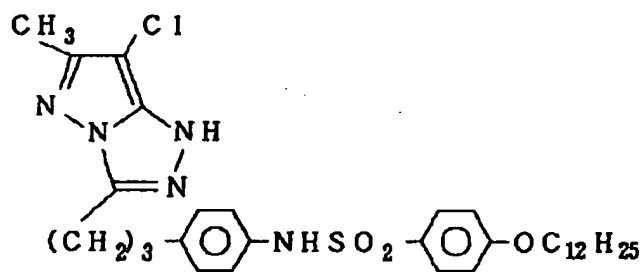
(M-21)



(M-22)



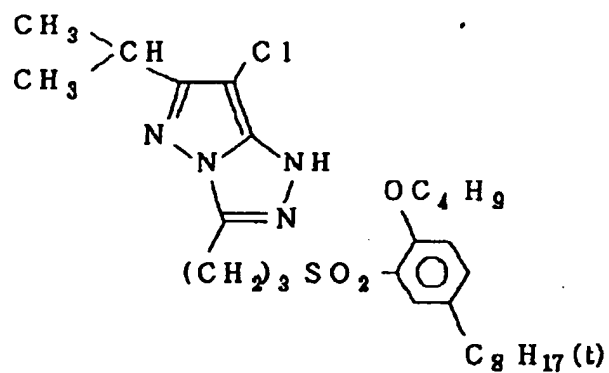
(M-23)



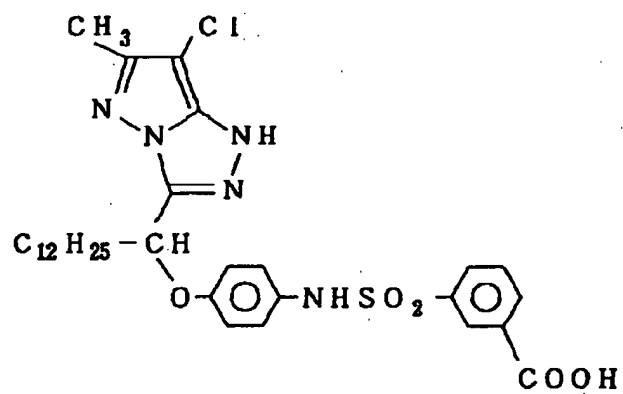
[0115]

\* \* 【化14】

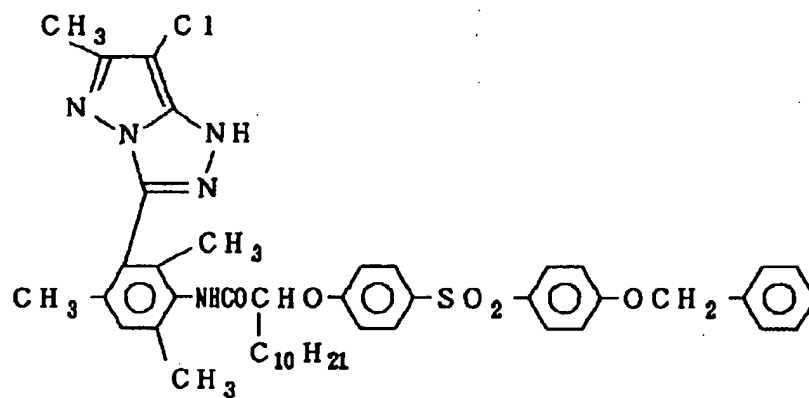
(M-24)



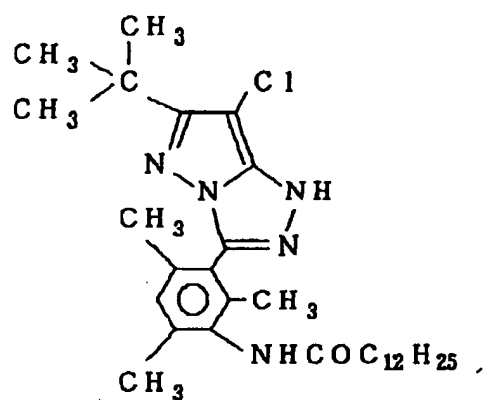
(M-25)



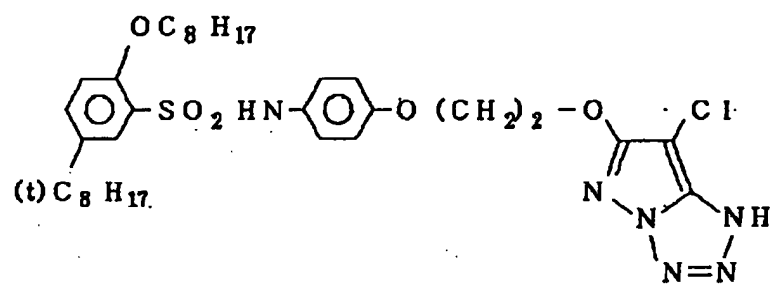
(M-26)



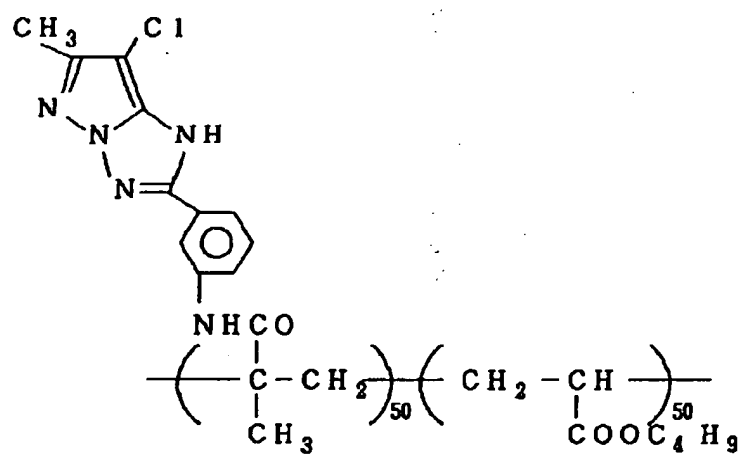
<sup>49</sup>  
(M-27)



(M-28)



(M-29)



【0117】

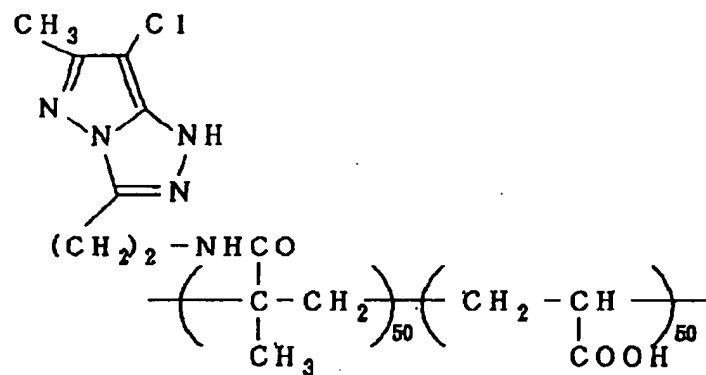
\*40\* 【化16】

(27)

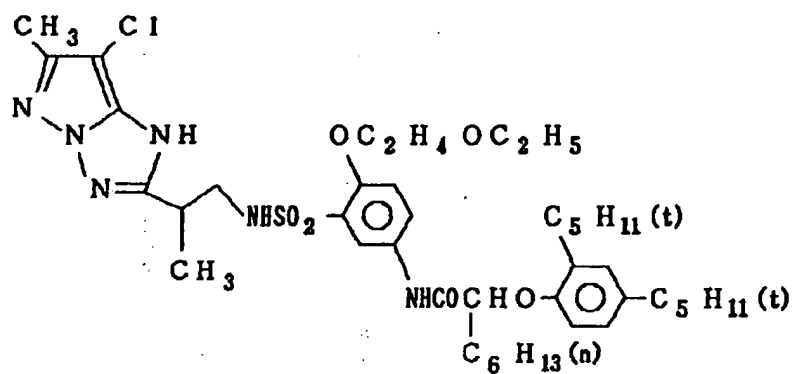
特開平5-113645

52

(M-30)



(M-31)



【0118】

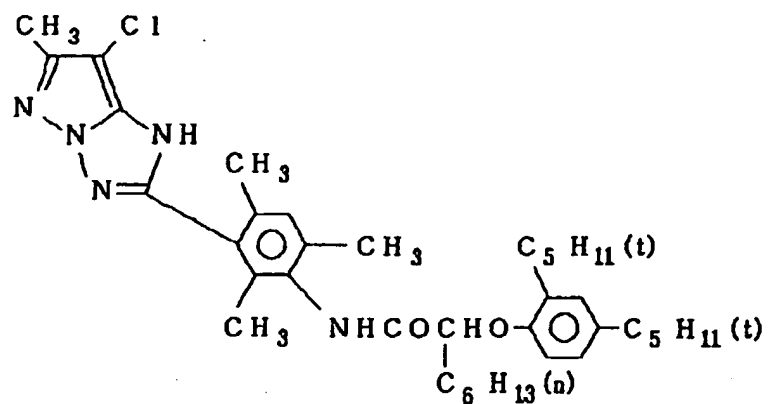
\* \* 【化17】

(28)

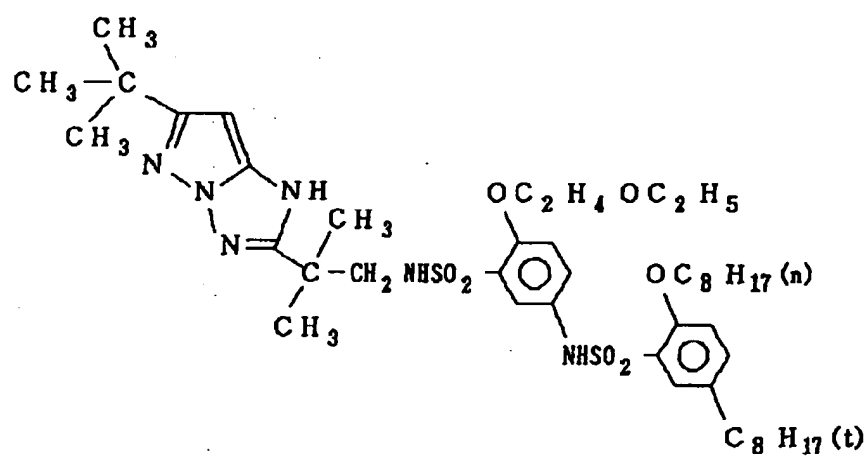
特開平5-113645

54

<sup>53</sup>  
(M-32)

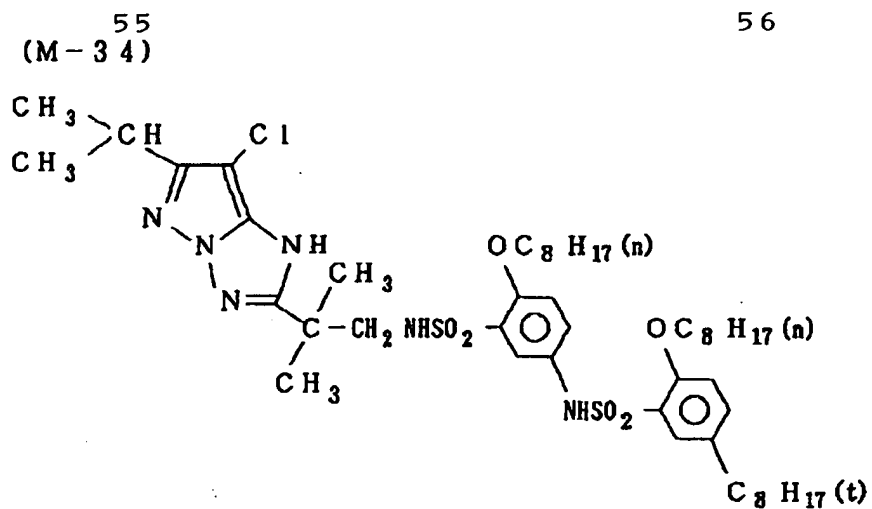


(M-33)

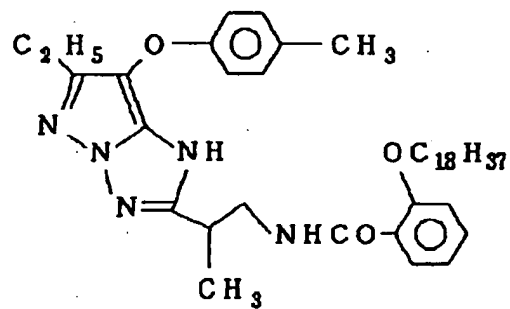


【0119】

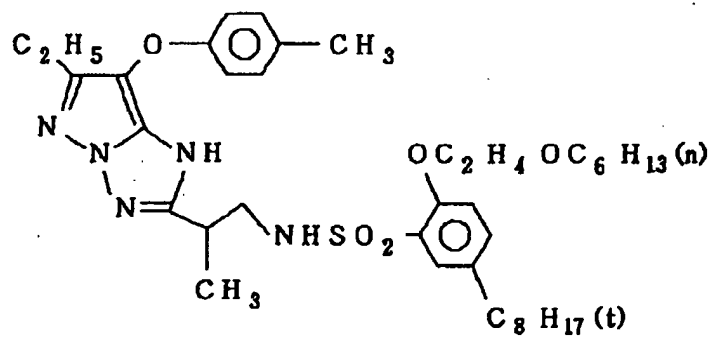
\* \* 【化18】



(M-35)



(M-36)

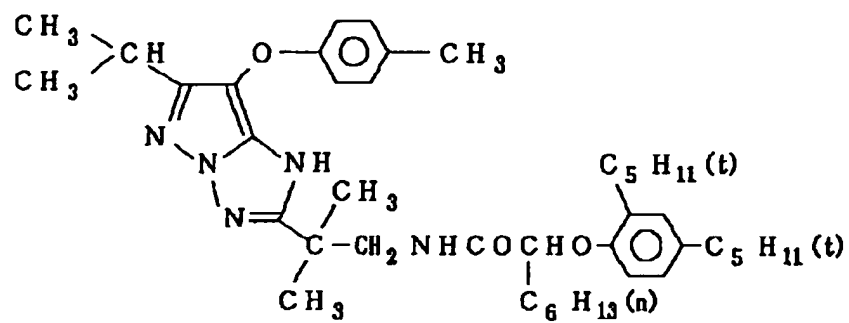


【0120】

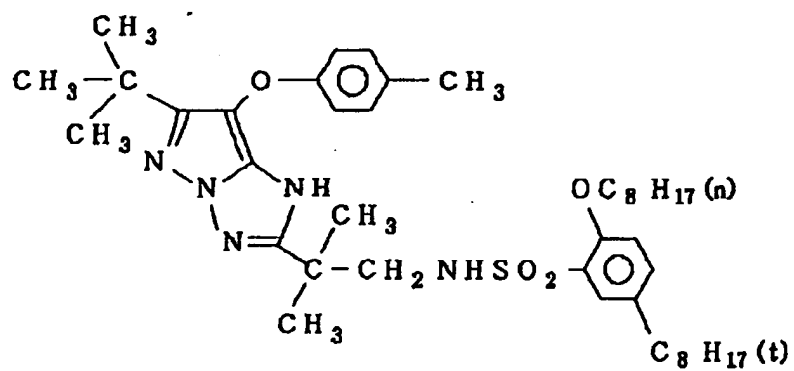
\*40\*【化19】

特開平5-113645

58



(M-38)



【0121】

\* \* 【化20】

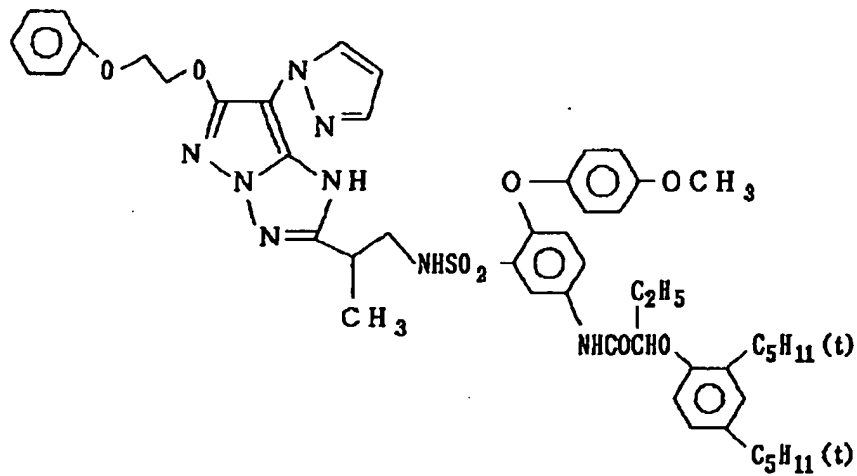


(31)

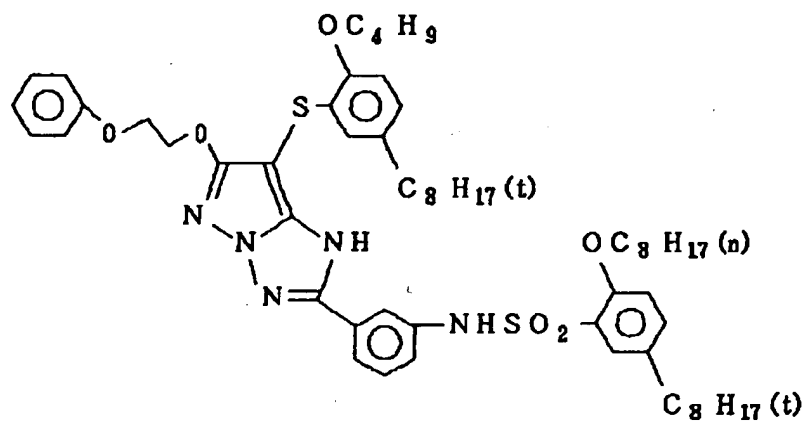
特開平5-113645

60

<sup>59</sup>  
(M-39)

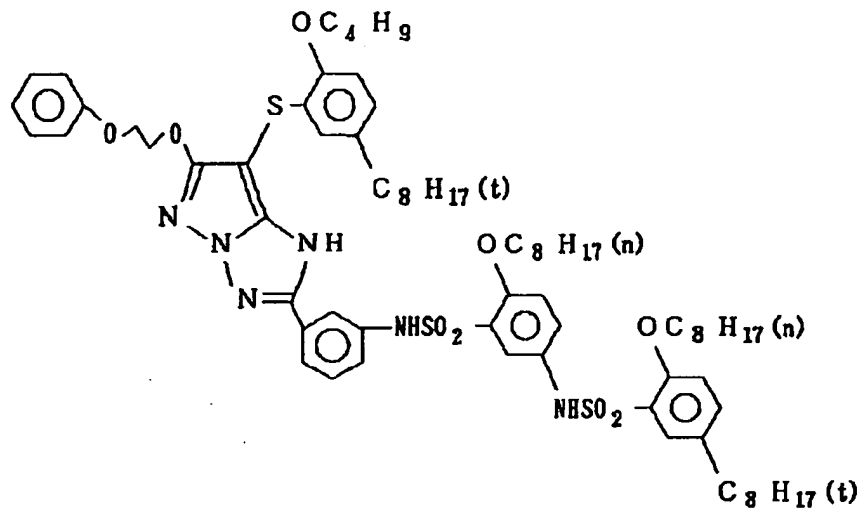


(M-40)

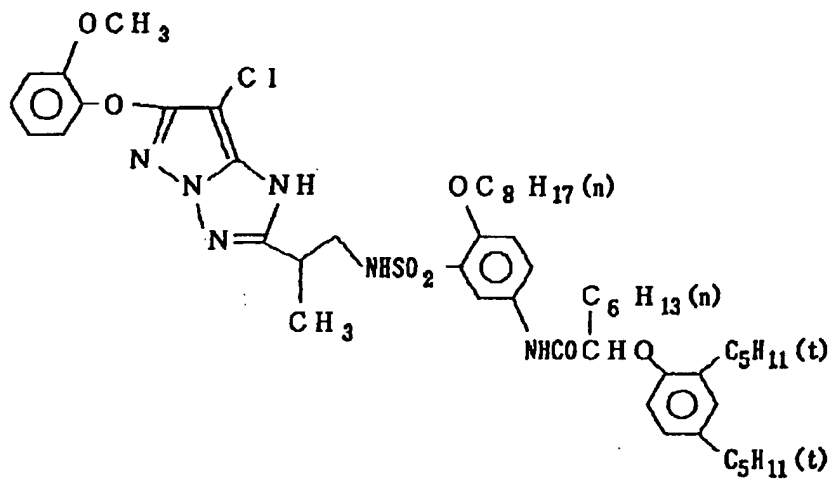


【0122】

\* \* 【化21】

(M-41)<sup>61</sup>

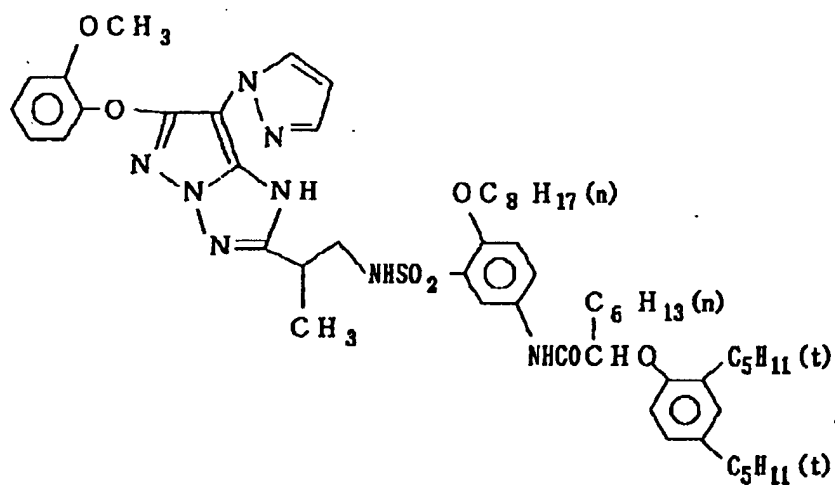
(M-42)



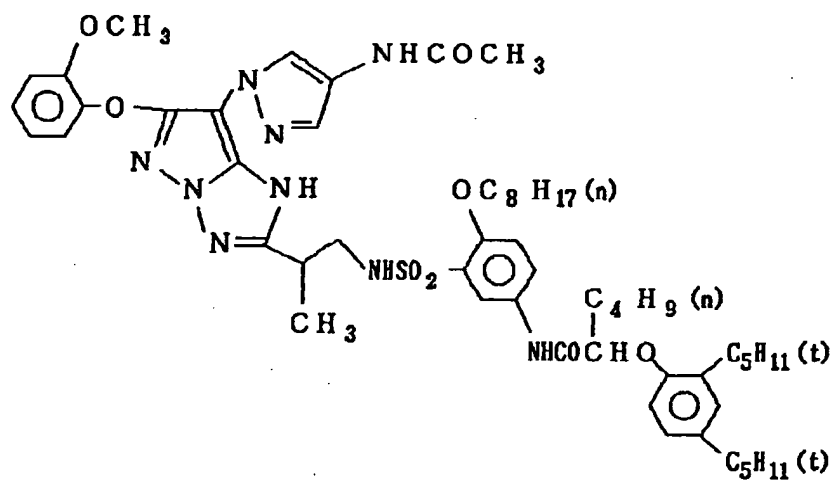
【0123】

\* \* 【化22】

63  
(M-43)



(M-44)



[0124]

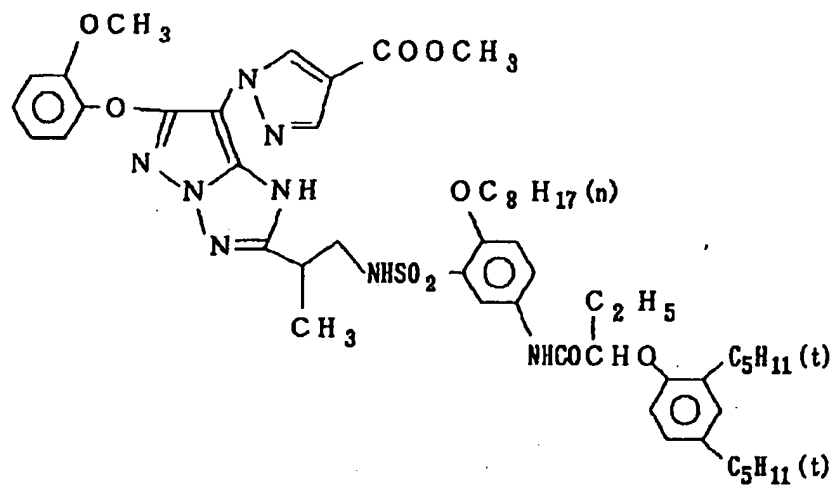
\* \* 【化23】

(34)

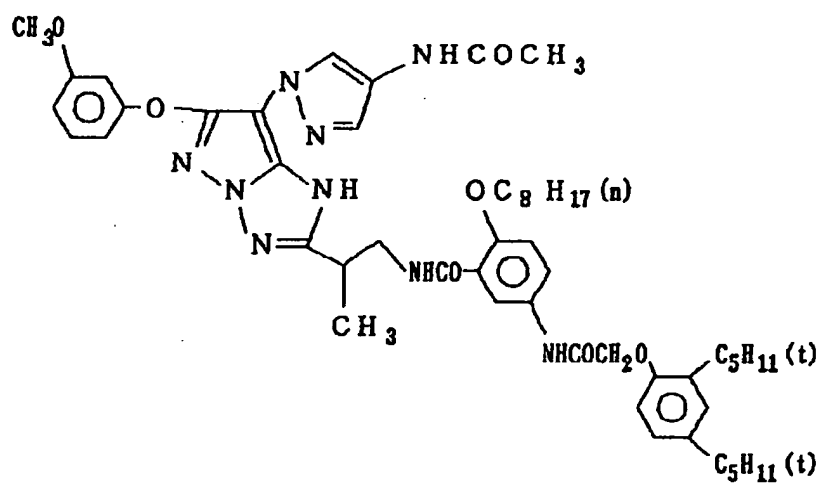
特開平5-113645

65  
(M-45)

66



(M-46)



【0125】

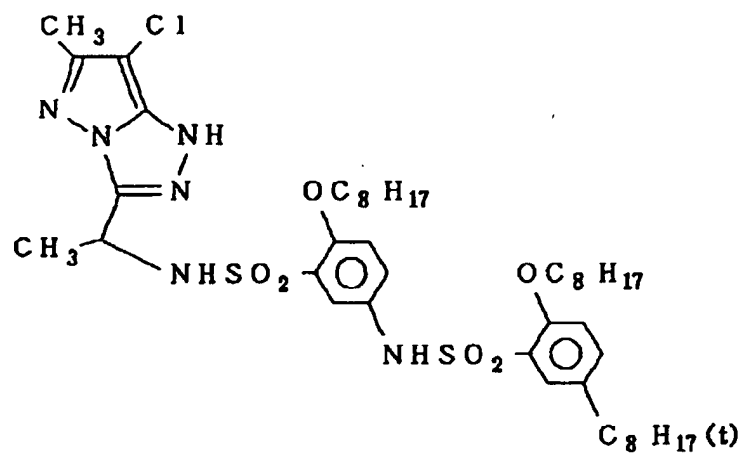
\* \* 【化24】

(35)

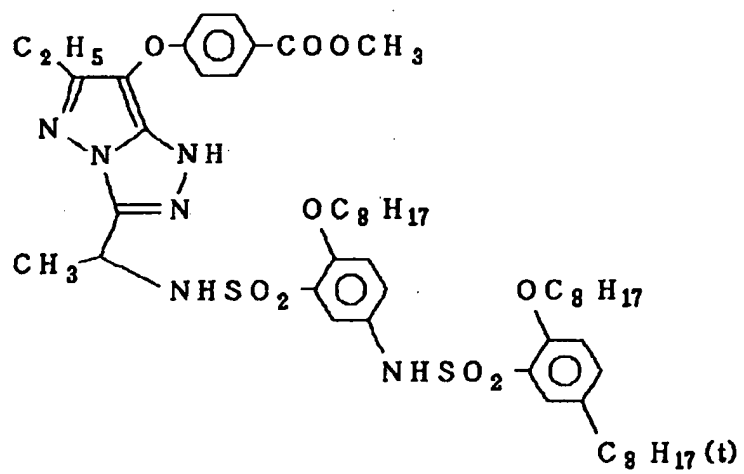
特開平5-113645

68

67  
(M-47)



(M-48)



【0126】

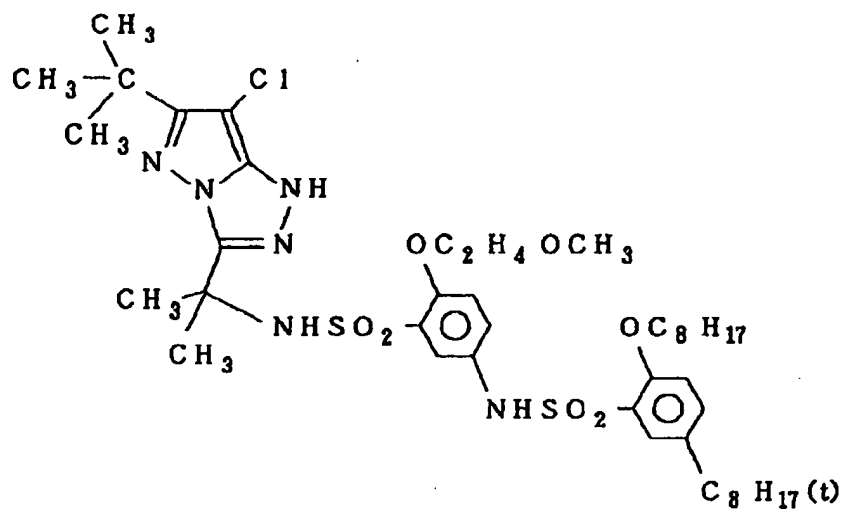
\* \* 【化25】

(36)

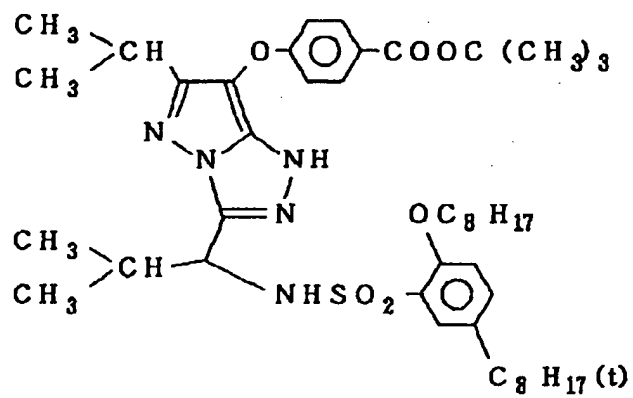
特開平5-113645

70

69  
(M-49)



(M-50)



【0127】

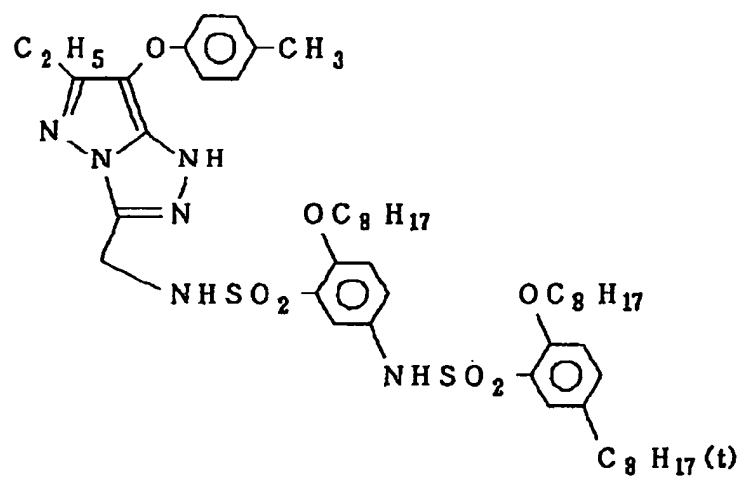
\* \* 【化26】

(37)

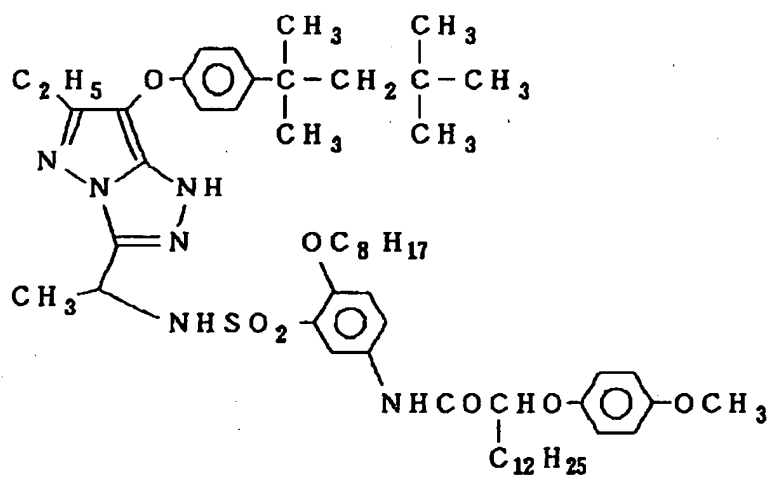
特開平5-113645

71  
(M-51)

72



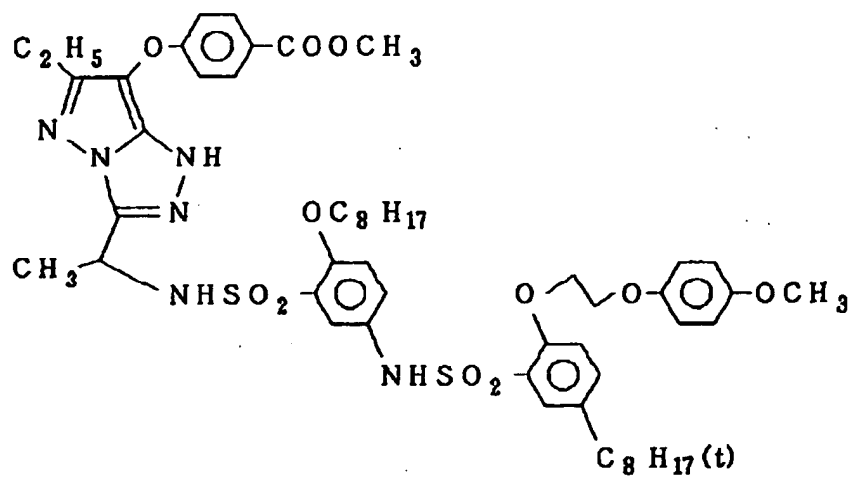
(M-52)



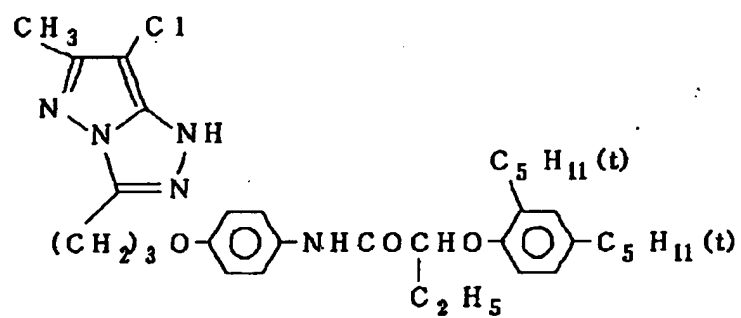
【0128】

\* \* 【化27】

73  
(M-53)



(M-54)

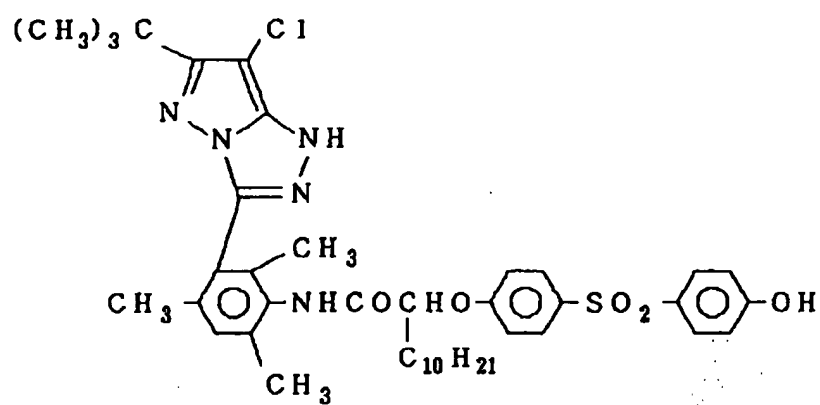


【0129】

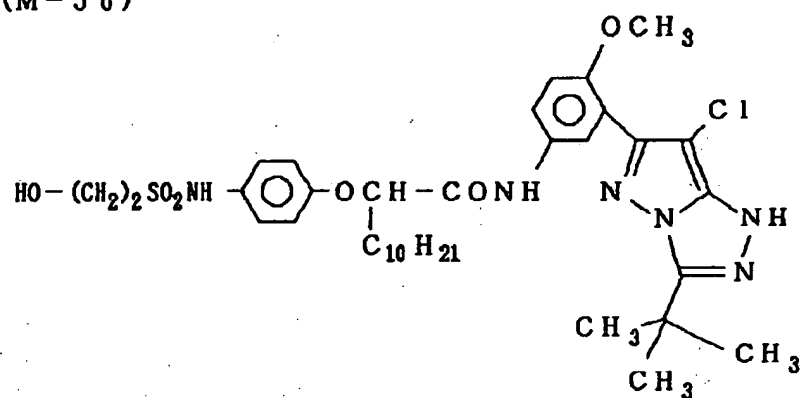
\* \* 【化28】



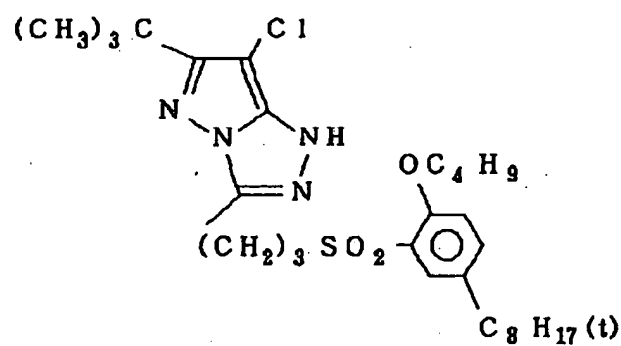
(M-55)



(M-56)

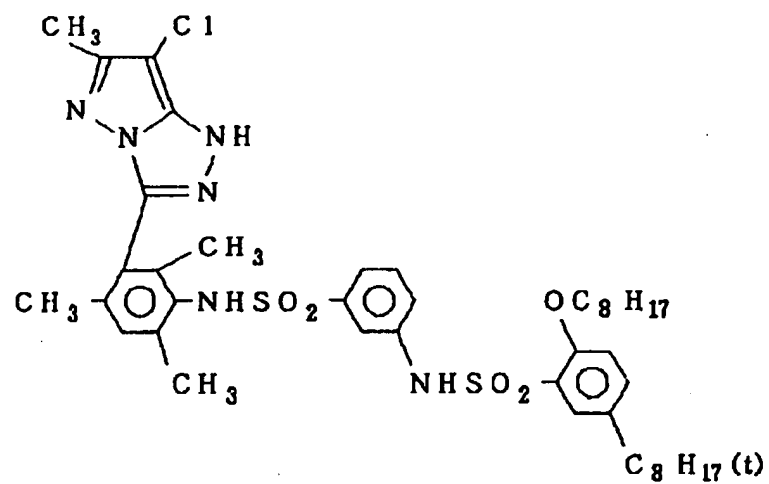


(M-57)

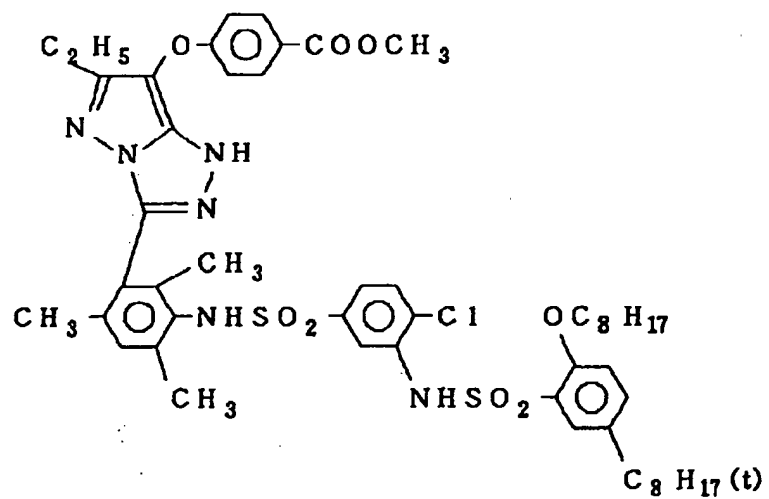


特開平5-113645

77  
(M-58)



(M-59)



**【0131】**

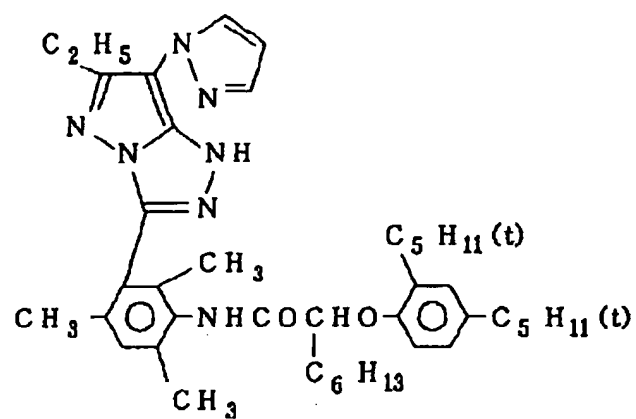
\* \* 【化30】

(41)

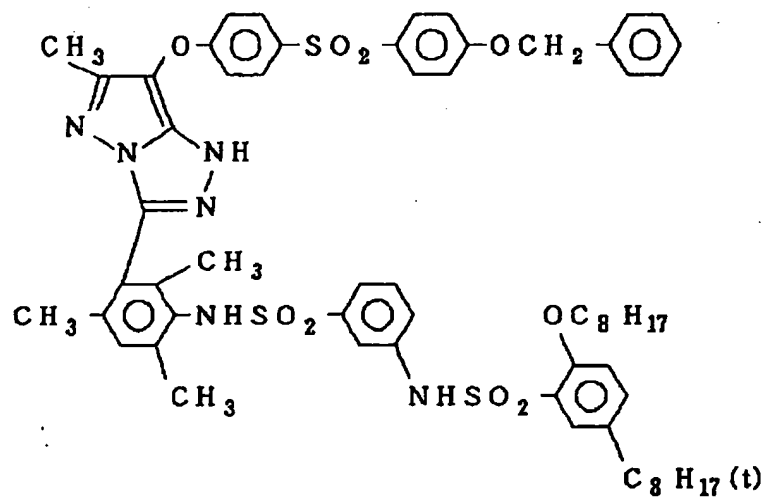
特開平5-113645

80

79  
(M-60)

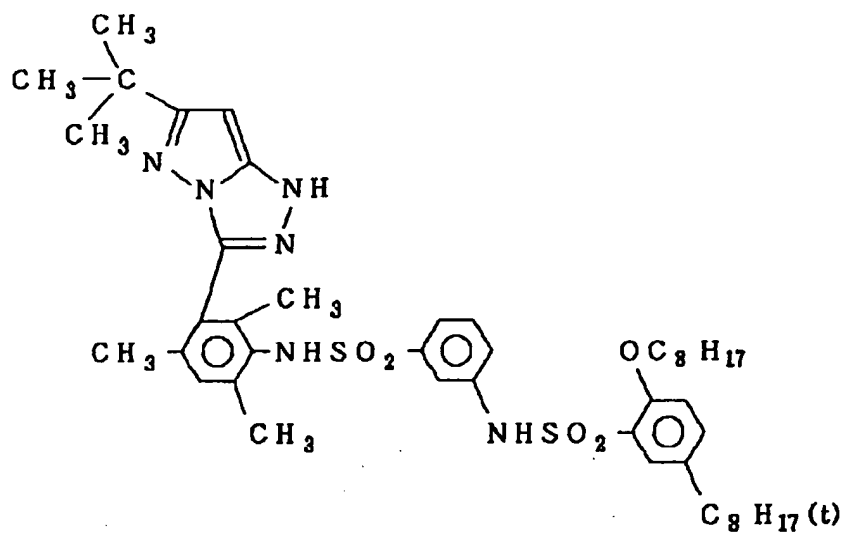


(M-61)

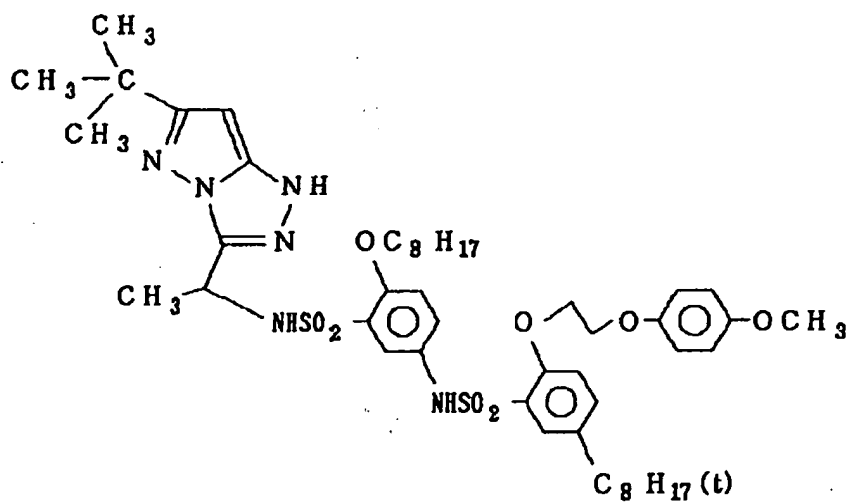


【0132】

\* \* 【化31】



(M-63)

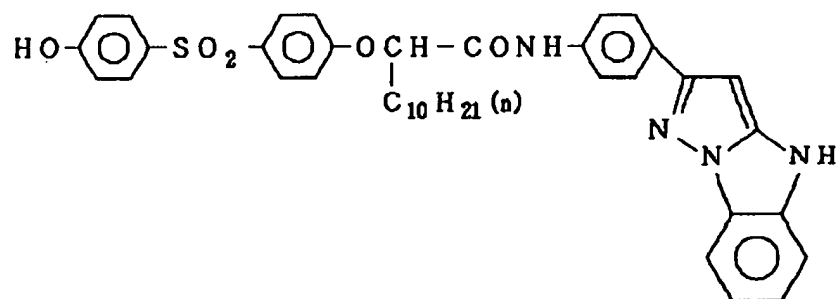


(43)

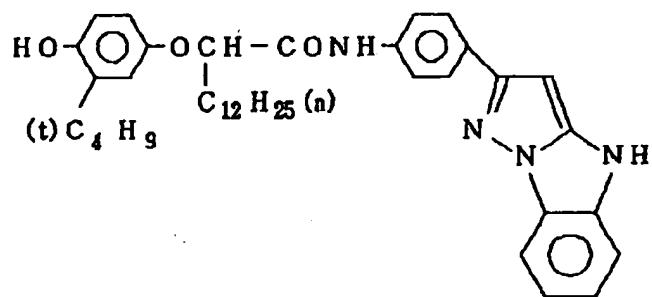
特開平5-113645

83  
(M-64)

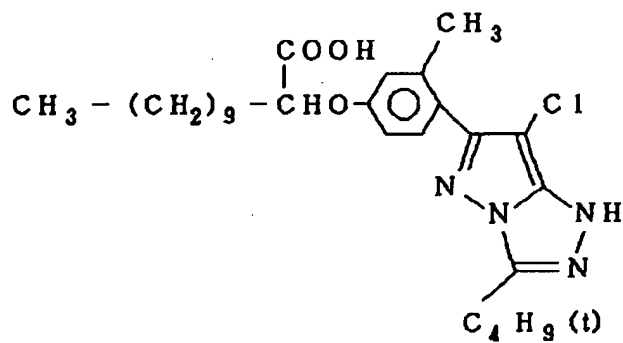
84



(M-65)



(M-66)

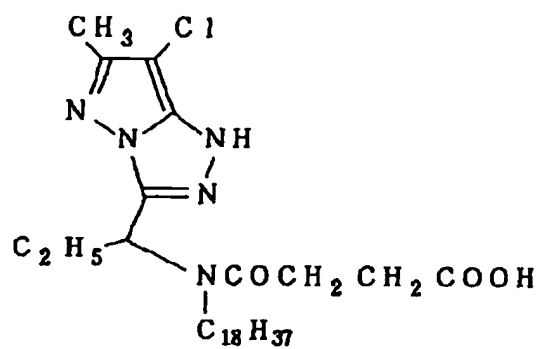


【0134】

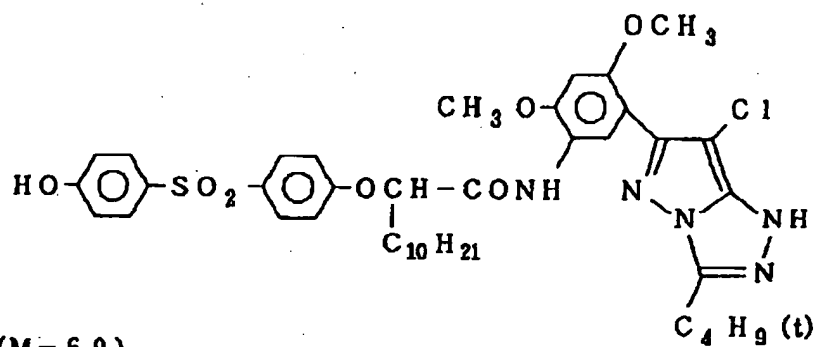
\* \* 【化33】

85  
(M-67)

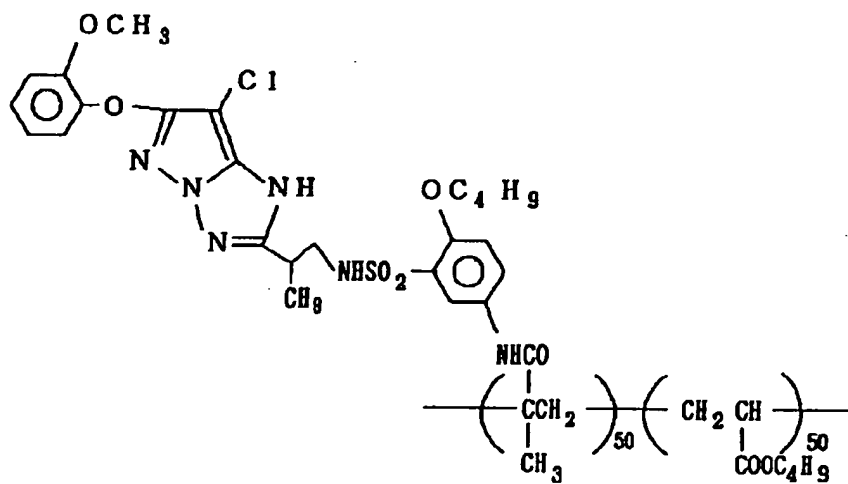
86



(M-68)



(M-69)



【0135】

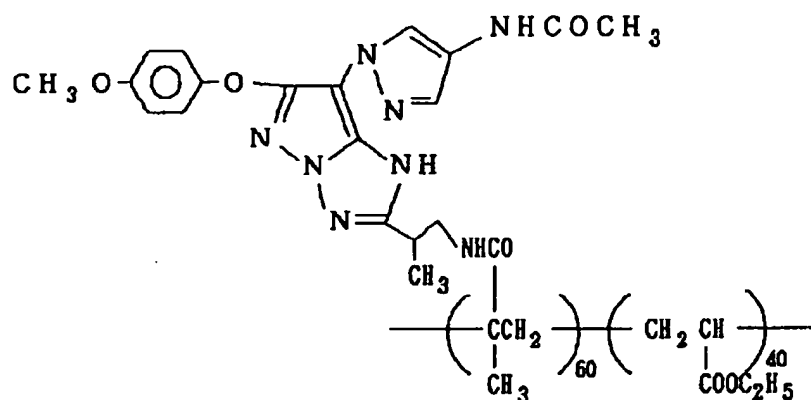
\* \* 【化34】

(45)

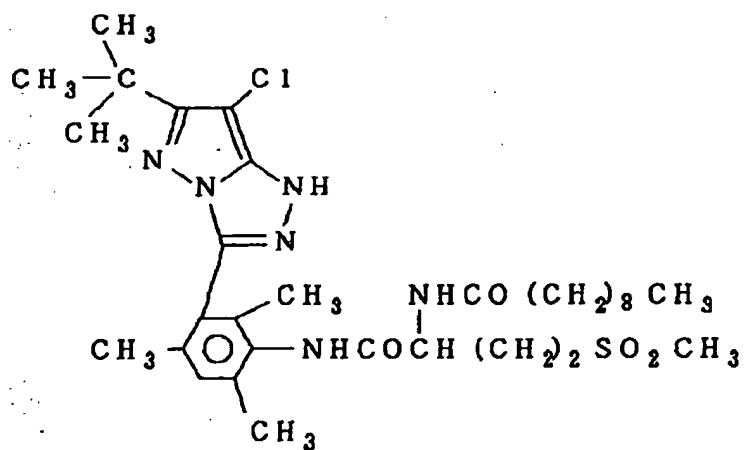
特開平5-113645

87  
(M-70)

88

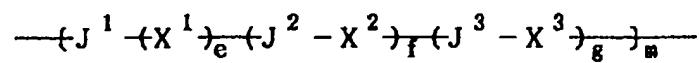


(M-71)



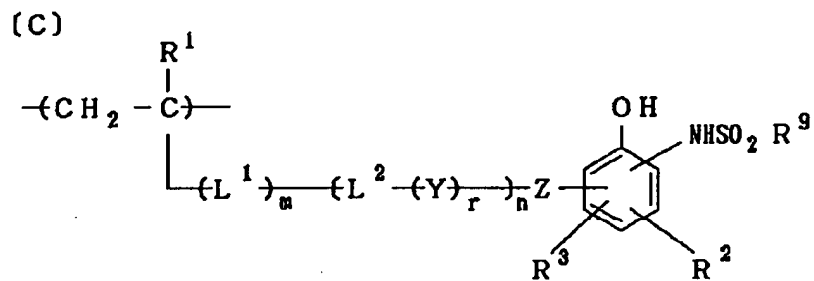
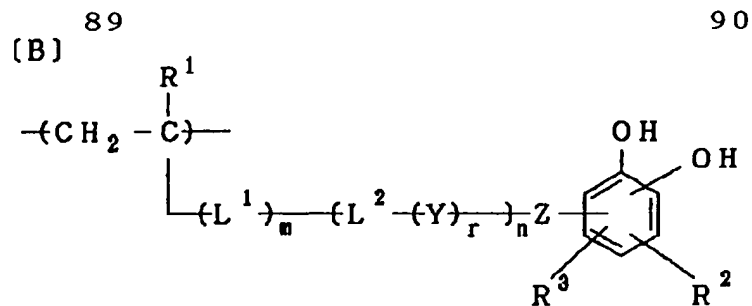
【0136】

\* \* 【化35】

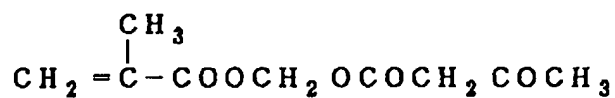
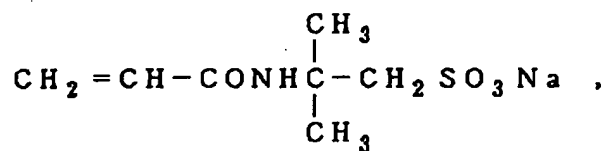
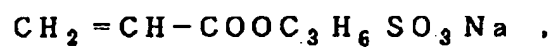
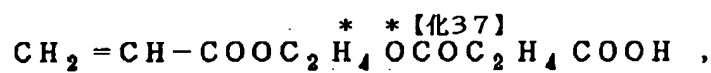


【0137】

※ ※ 【化36】



【0138】



【0139】

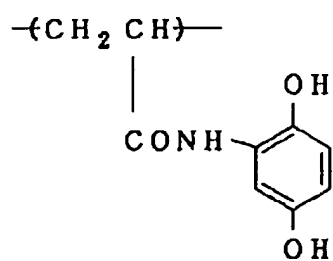
※ ※【化38】



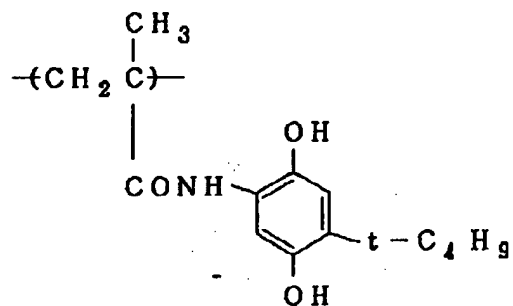
(47)

特開平5-113645

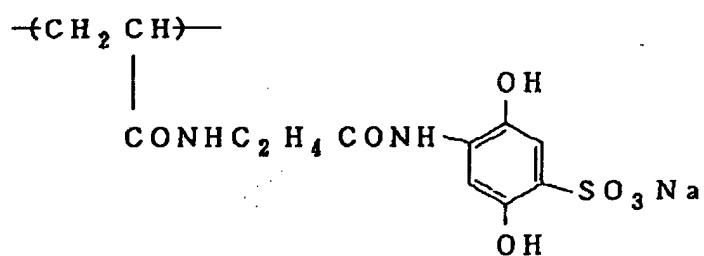
92

(1)<sup>91</sup>

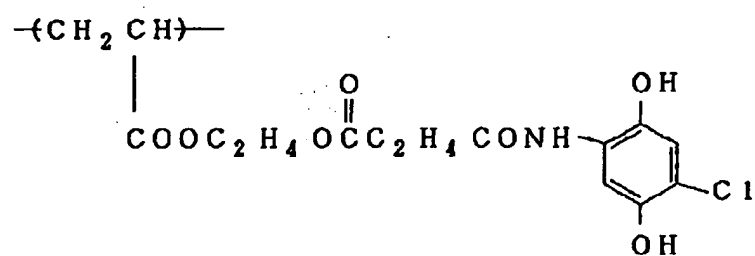
(2)



(3)



(4)



【0140】

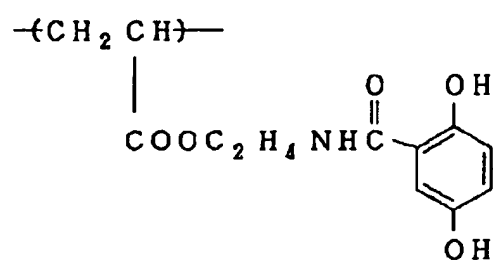
\*40\*【化39】

(48)

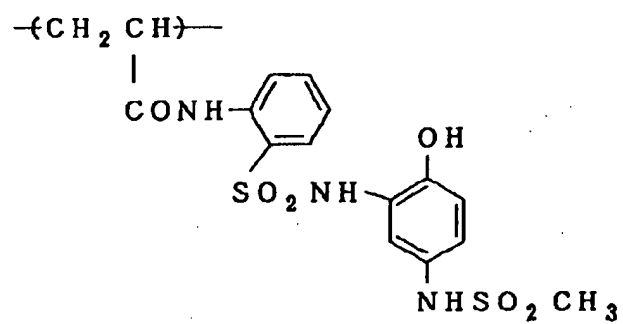
特開平5-113645

94

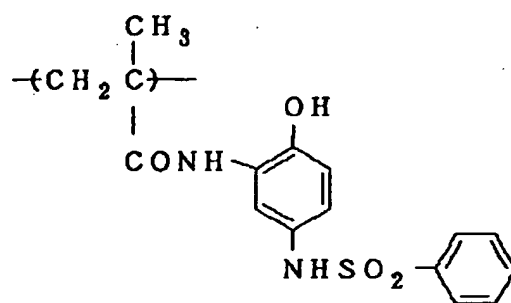
(5)



(6)



(7)



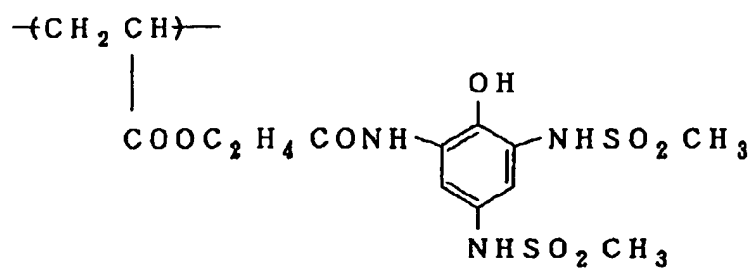
【0141】

\* \* 【化40】

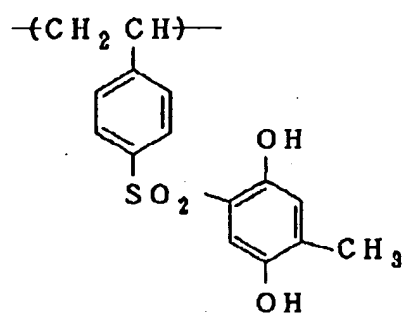
(49)

特開平5-113645

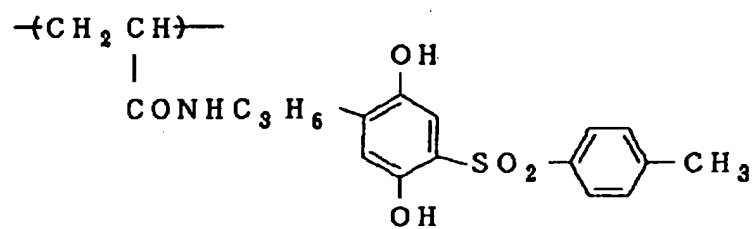
96

95  
(8)

(9)



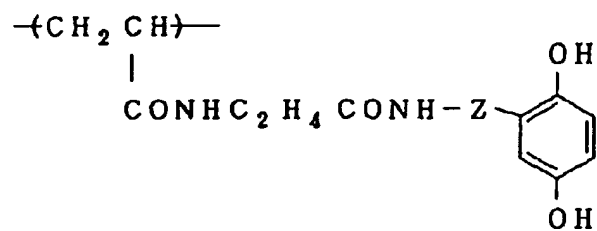
(10)



【0142】

\* \* 【化41】

97  
(11)

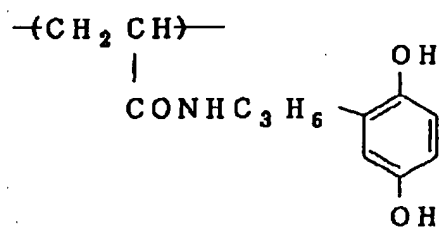


ただし Z = -C<sub>3</sub>H<sub>6</sub>-

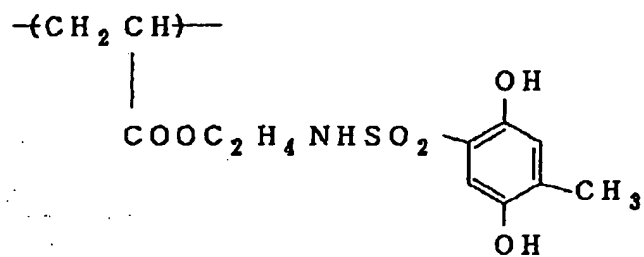
(12)

(1) 式において Z =  $\begin{array}{c} \text{-CHCH}_2\text{-} \\ | \\ \text{CH}_3 \end{array}$  の化合物

(13)



(14)

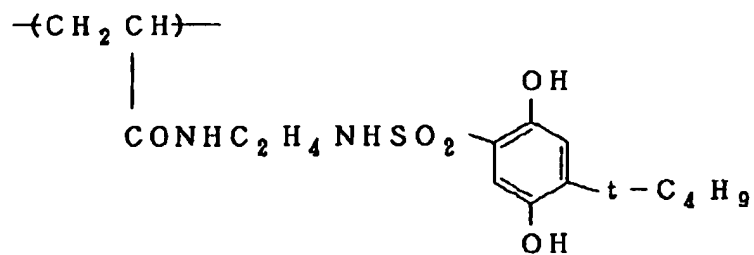


(51)

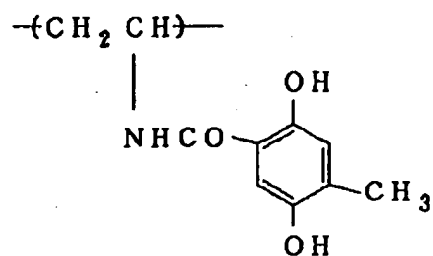
特開平5-113645

<sup>99</sup>  
(15)

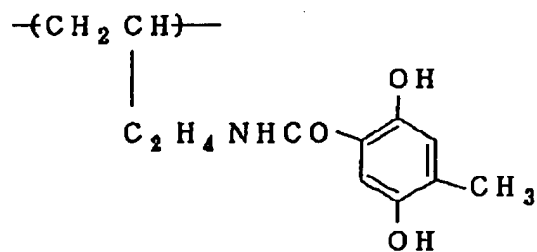
100



(16)



(17)



【0144】

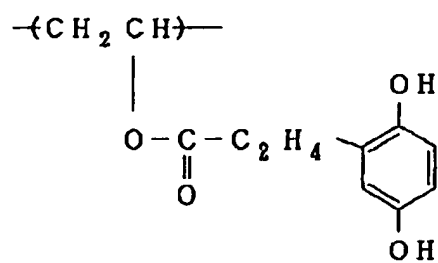
\* \* 【化43】

(52)

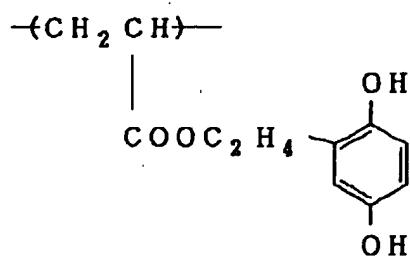
特開平5-113645

101  
(18)

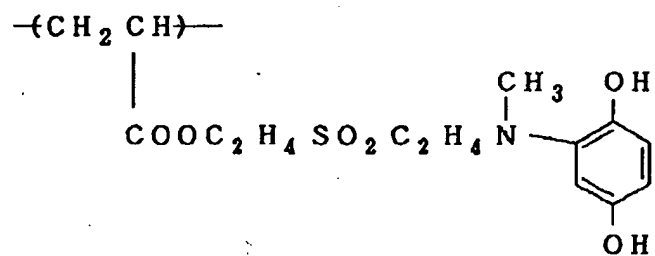
102



(19)



(20)



【0145】

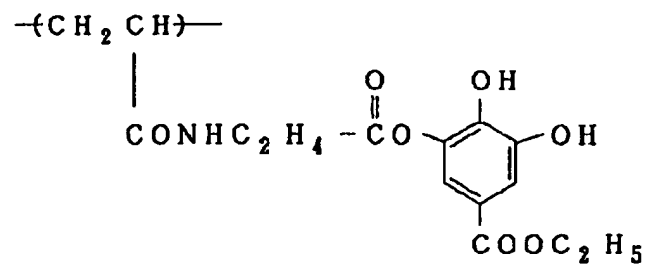
\* \* 【化44】

(53)

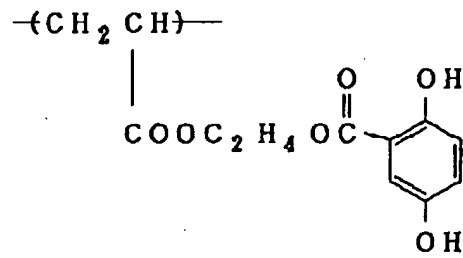
特開平5-113645

104

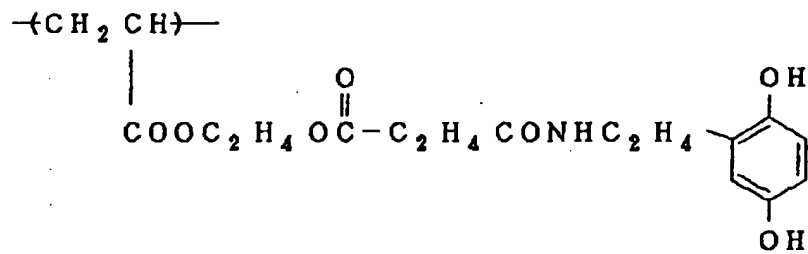
<sup>103</sup>  
(21)



(22)



(23)



【0146】

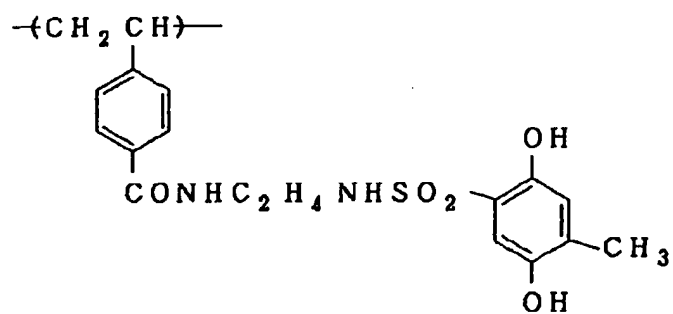
\* \* 【化45】

(54)

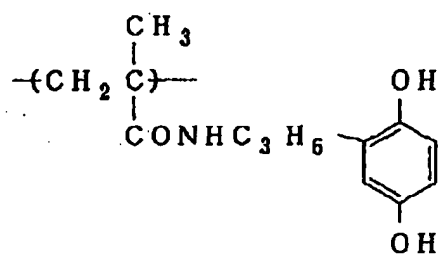
特開平5-113645

105  
(24)

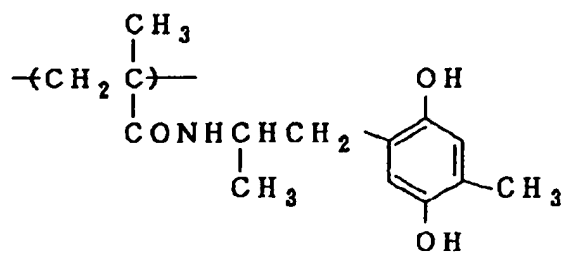
106



(25)



(26)



【0147】

\* \* 【化46】

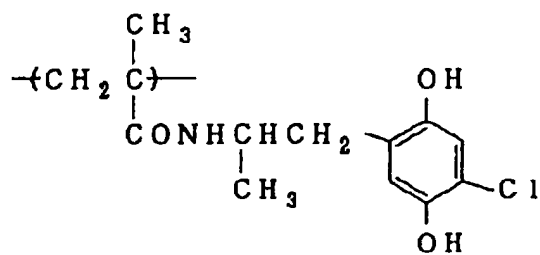


(55)

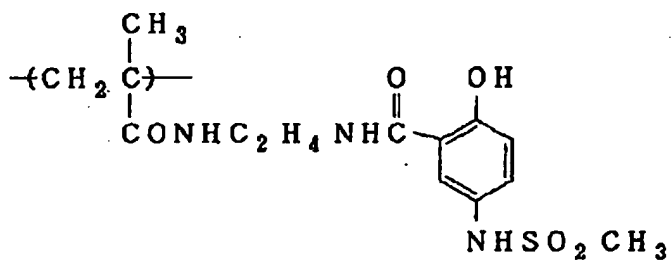
特開平5-113645

107  
(27)

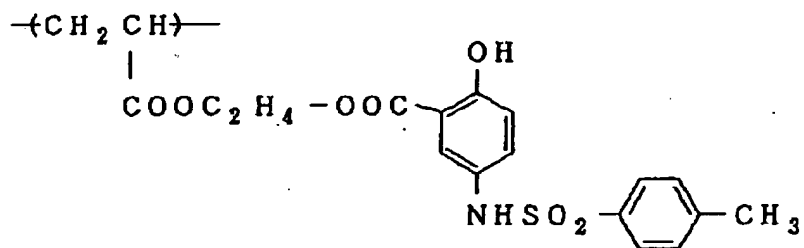
108



(28)



(29)



【0148】

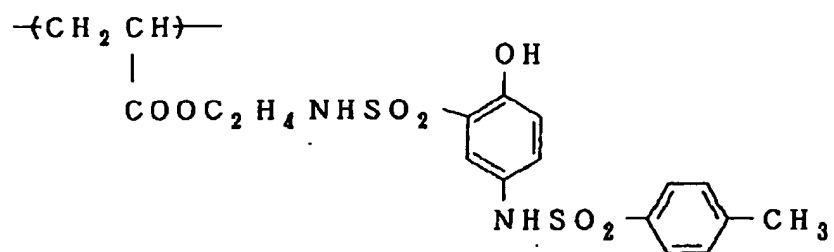
\* \* 【化47】

(56)

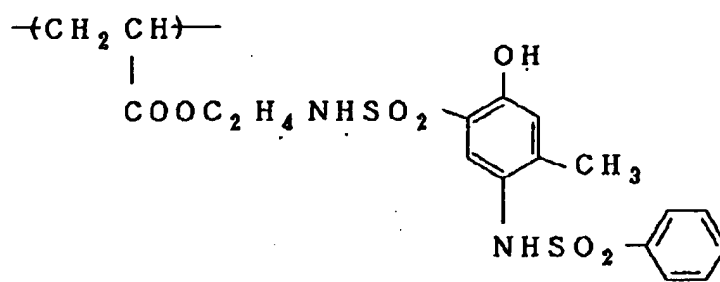
特開平5-113645

110

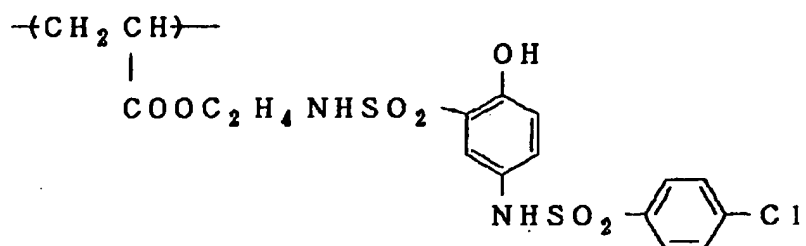
109  
(30)



(31)



(32)



【0149】

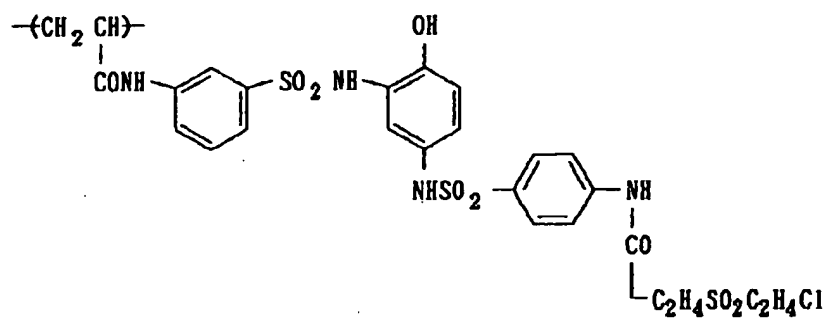
\* \* 【化48】

(57)

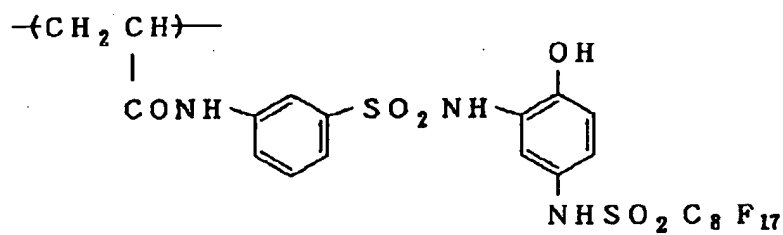
特開平5-113645

112

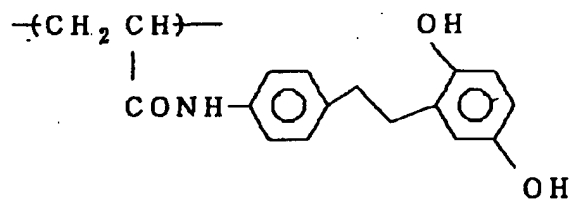
111  
(33)



(34)



(35)

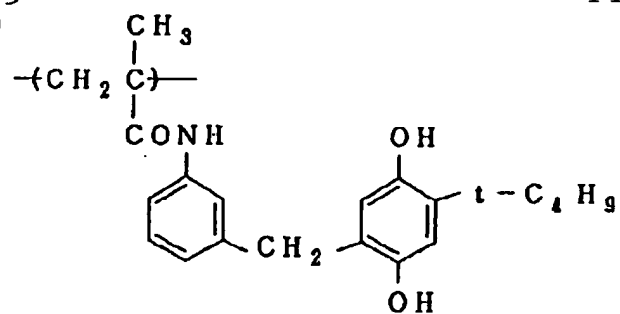


【0150】

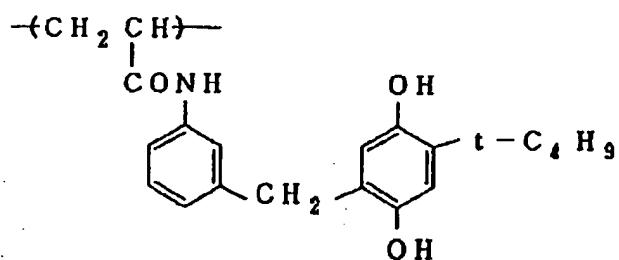
\* \* 【化49】

113  
(36)

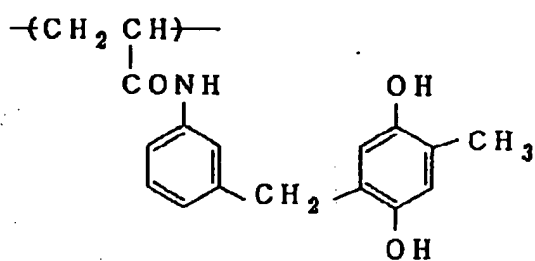
114



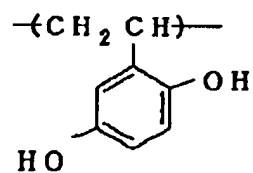
(37)



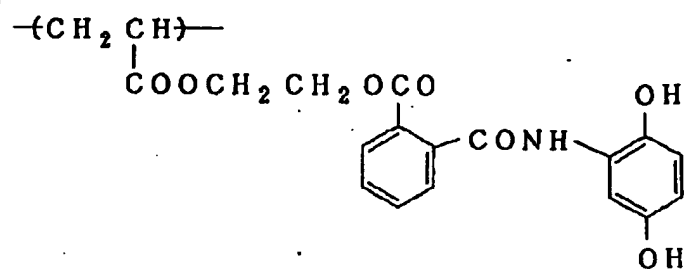
(38)



(39)



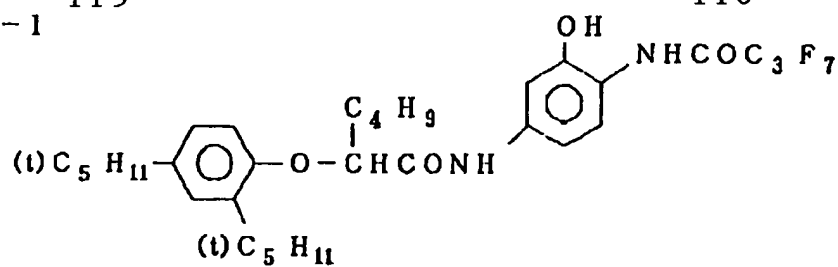
(40)



(59)

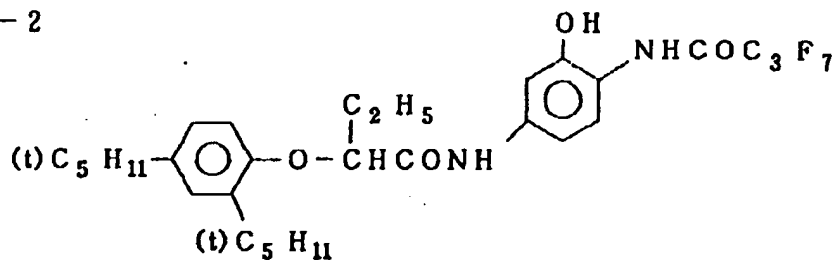
特開平5-113645

C-1 115

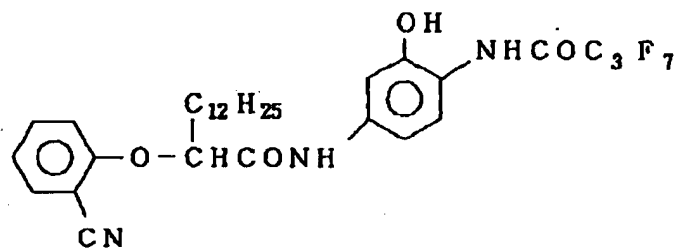


116

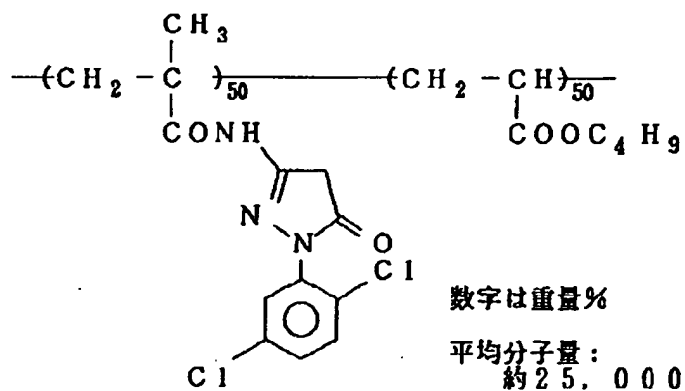
C-2



C-3



C-4



数字は重量%

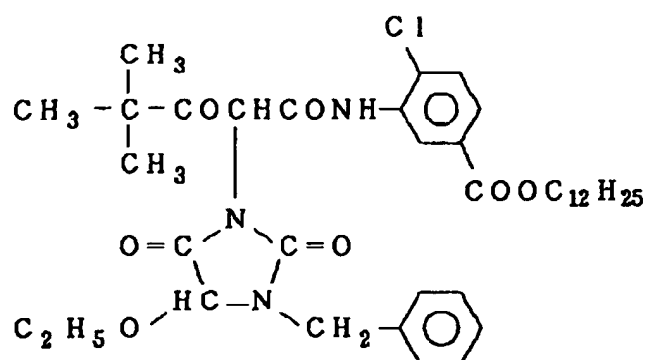
平均分子量:  
約25,000

【0152】

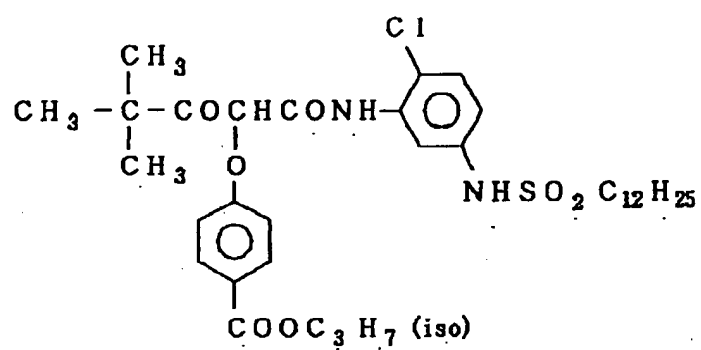
\*40\*【化51】

C-5 117

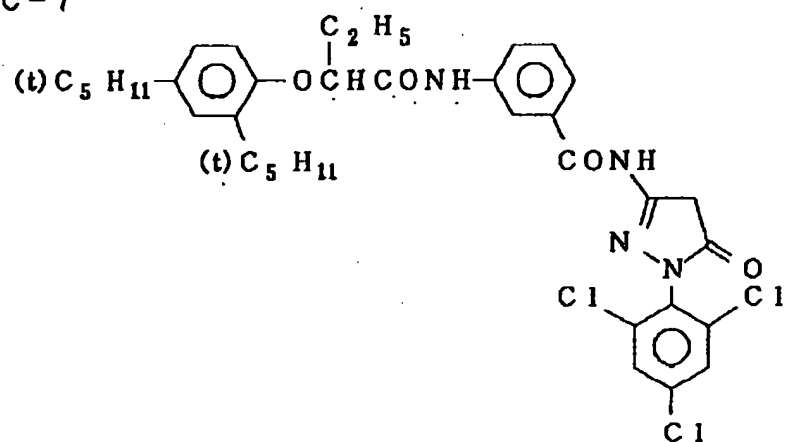
118



C-6



C-7

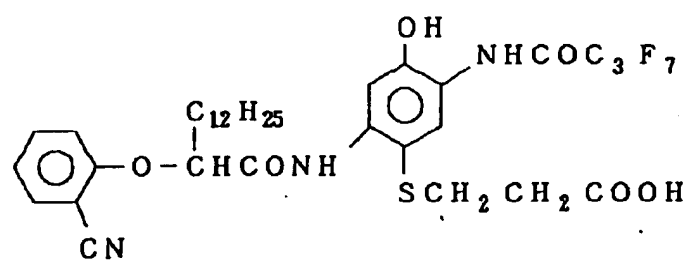


(61)

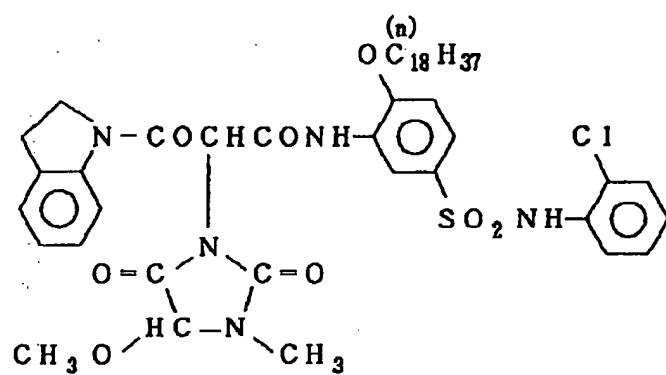
特開平5-113645

119  
C-8

120



C-9



【0154】

\* \* 【化53】

121  
Oil-1

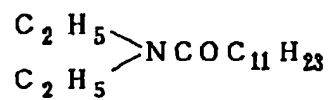
フタル酸ジブチル

122

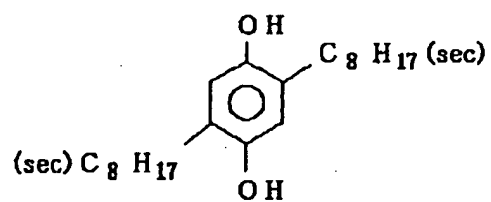
Oil-2

リン酸トリクレジル

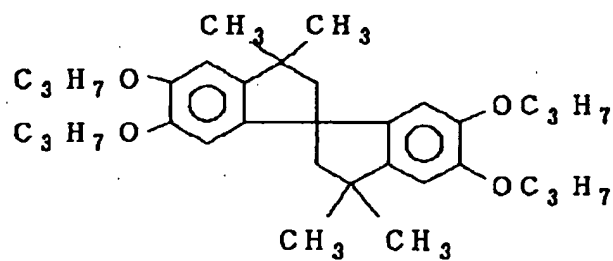
Oil-3



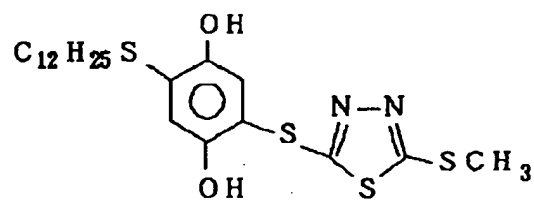
Cpd-A



Cpd-B



Cpd-C



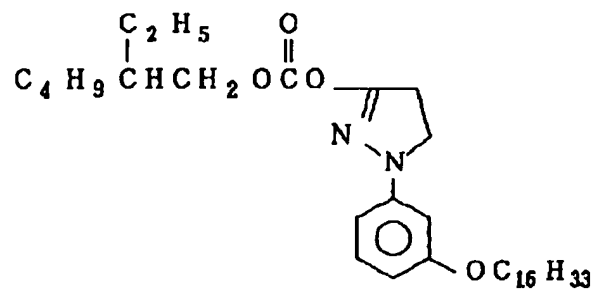


(63)

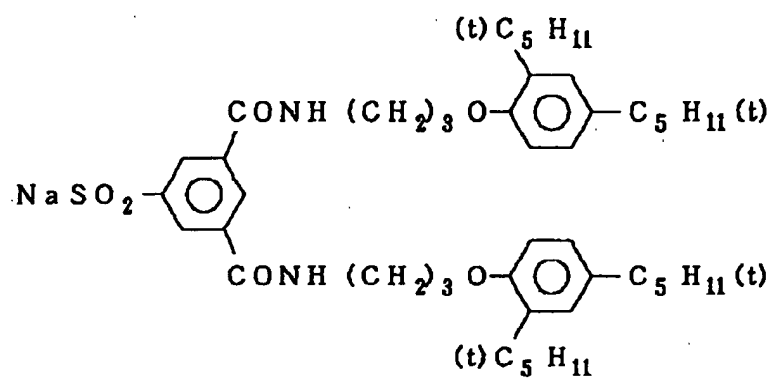
特開平5-113645

Cpd-D<sup>123</sup>

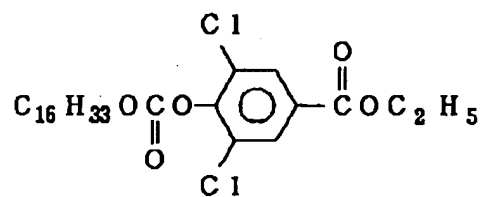
124



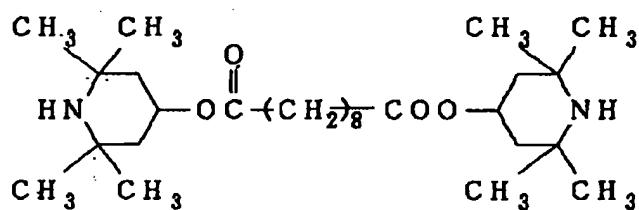
Cpd-E



Cpd-F



Cpd-G



【0156】

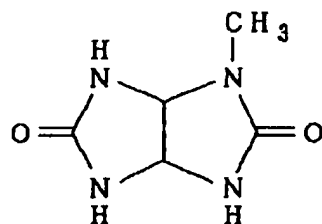
\* \* 【化55】

(64)

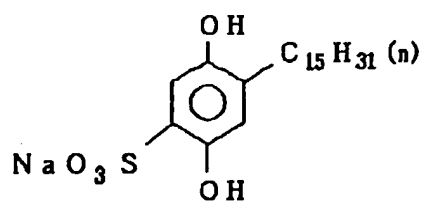
特開平5-113645

125  
Cp d - H

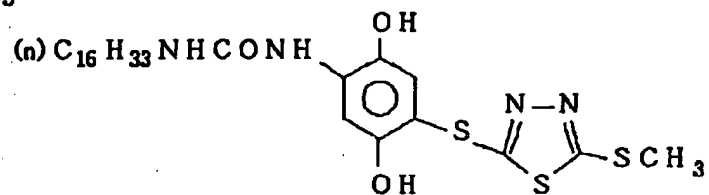
126



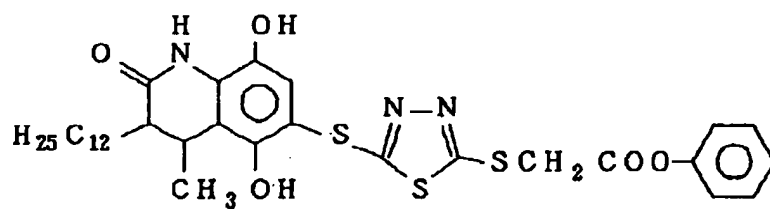
Cp d - I



Cp d - J



Cp d - K



【0157】

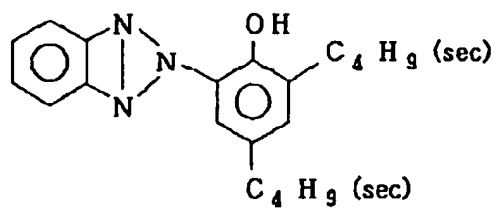
\* \* 【化56】

(65)

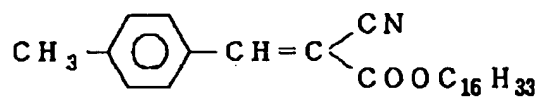
特開平5-113645

127  
U-1

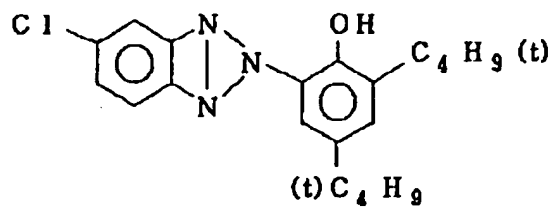
128



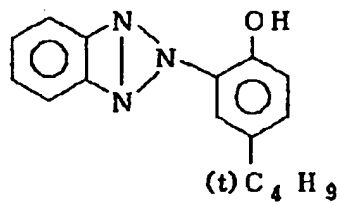
U-2



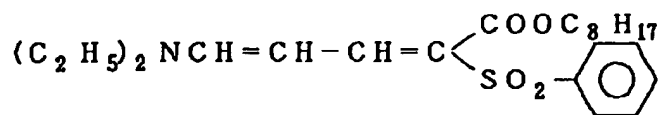
U-3



U-4



U-5

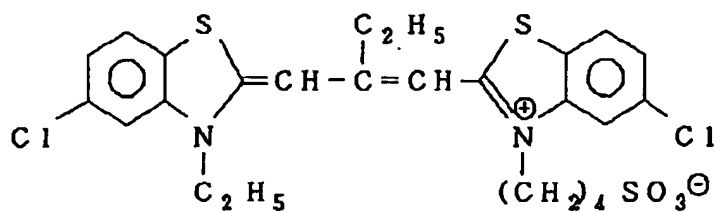


【0158】

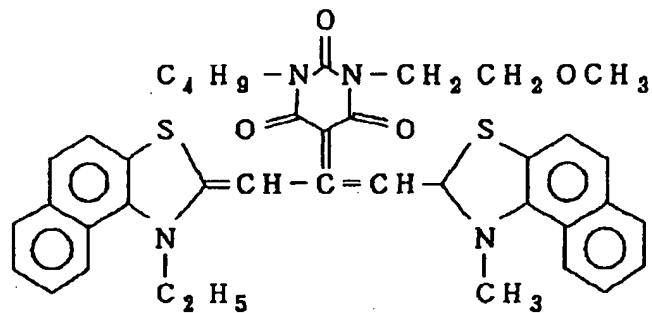
\* \* 【化57】

S-1<sup>129</sup>

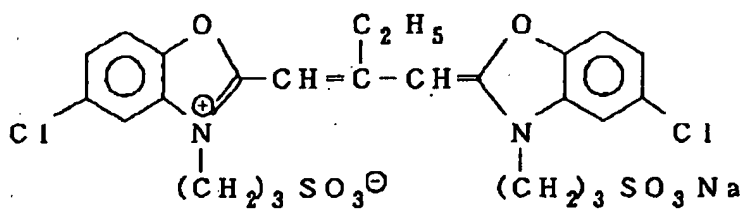
130



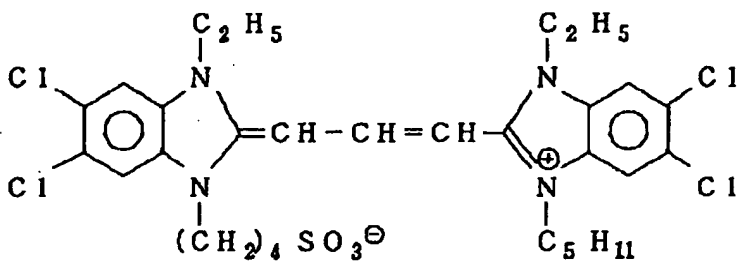
S-2



S-3

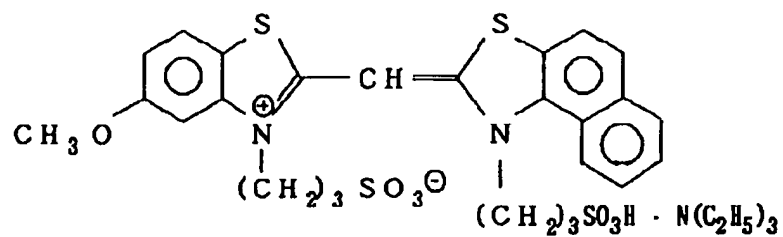


S-4

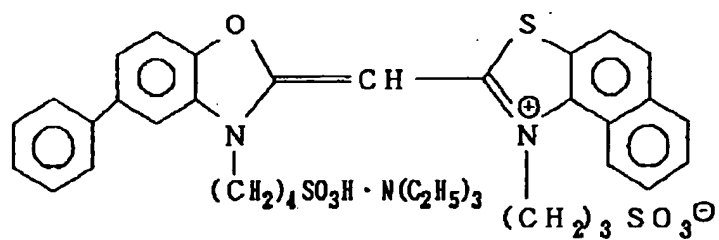


S-5<sup>131</sup>

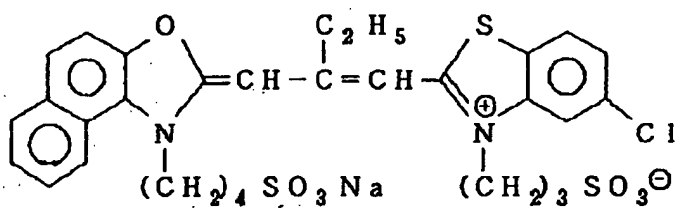
132



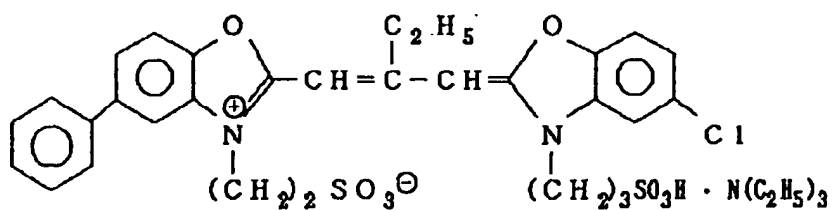
S-6

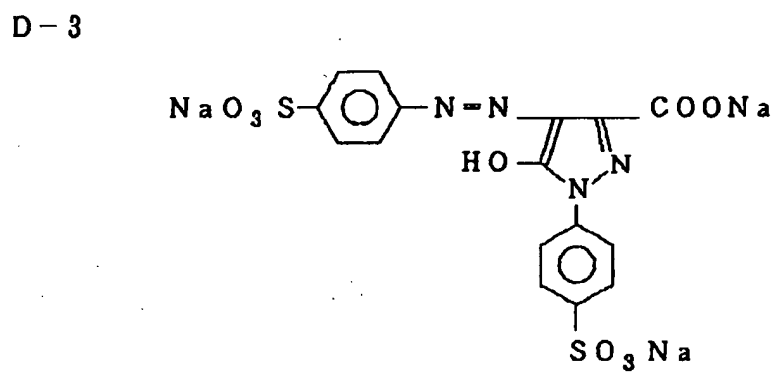
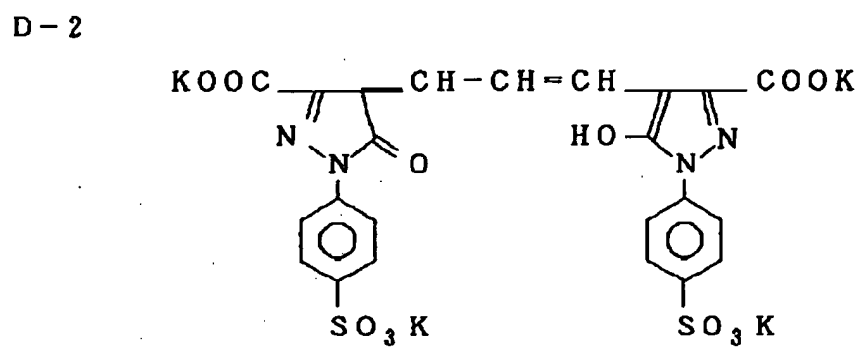
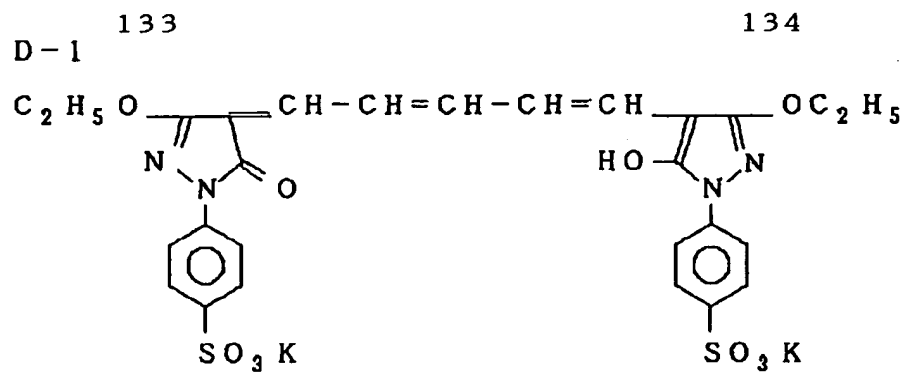


S-7



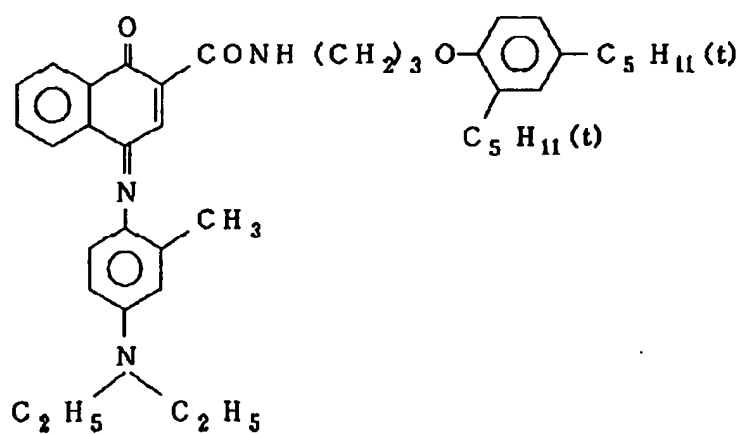
S-8



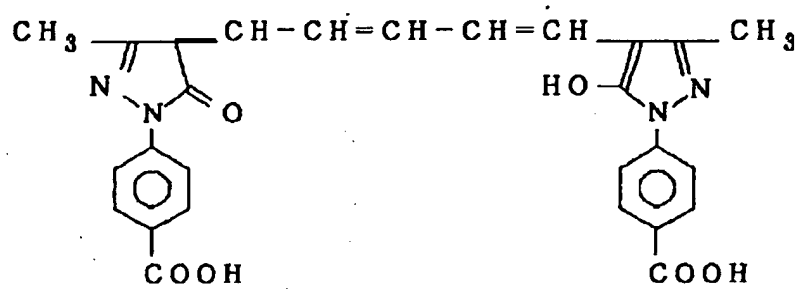


D-4 135

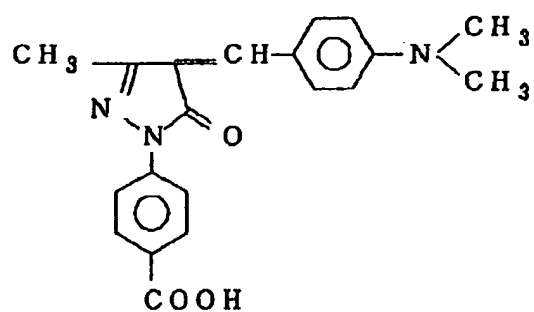
136



E-1



E-2

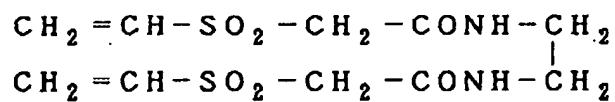


【0162】

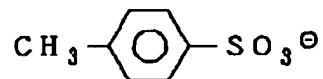
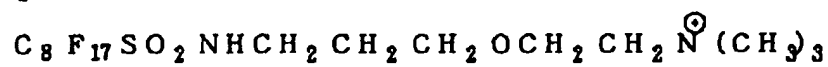
\* \* 【化61】

H-1 137

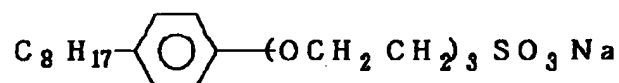
138



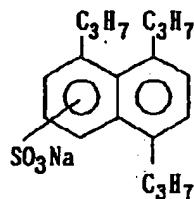
W-1



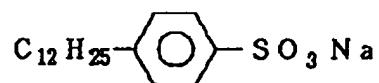
W-2



W-3



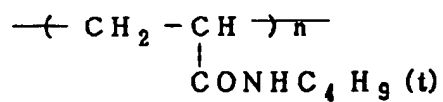
W-4



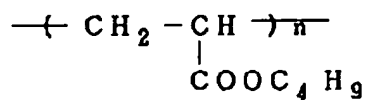


139  
P-1

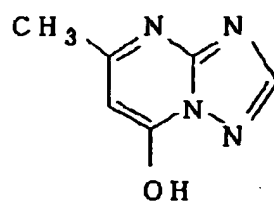
140



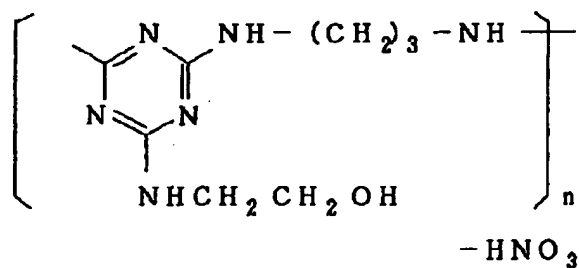
M-1



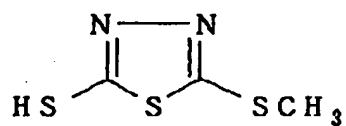
F-1



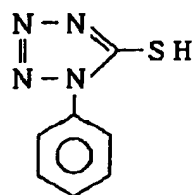
F-2



F-3



F-4

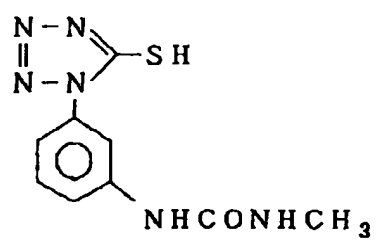


(72)

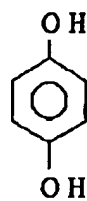
特開平5-113645

141  
F-5

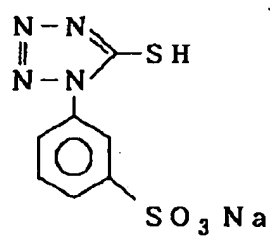
142



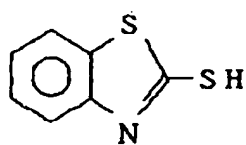
F-6



F-7



F-8



【0165】

\* \*【表1】

本発明の化合物例  $-(D)_x-(E)_y-(F)_z$

化合物 番 号	一般式 (A) の繰返し単位 D	E	F	x / y / z (重量比)
P-1	(1)	BA	—	50/50
P-2	(1)	BA	—	30/70
P-3	(2)	MA	—	40/60
P-4	(6)	BA	MA	70/15/15
P-5	(6)	BA	MEA	60/20/20
P-6	(8)	EA	—	50/50
P-7	(11)	BA	—	50/50
P-8	(11)	BA	—	65/35
P-9	(13)	BA	—	30/70
P-10	(13)	BA	—	50/50
P-11	(18)	$-\text{CH}_2-\underset{\text{OH}}{\text{CH}}-$	$-\text{CH}_2-\underset{\text{OCOCH}_3}{\text{CH}}-$	73/20/7
P-12	(23)	—	—	100
P-13	(25)	BA	AA	50/45/5
P-14	(25)	AMPS - Na	—	49/51
P-15	(26)	MA	—	68/32
P-16	(29)	BA	MSAEA	65/25/10
P-17	(32)	BA	—	75/25

(74)

特開平5-113645

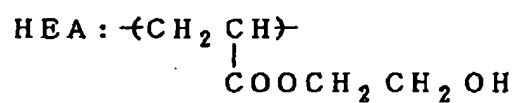
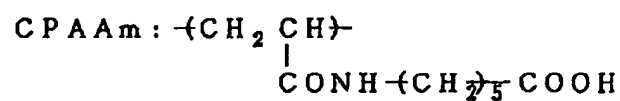
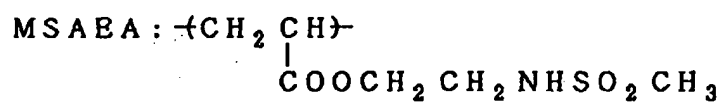
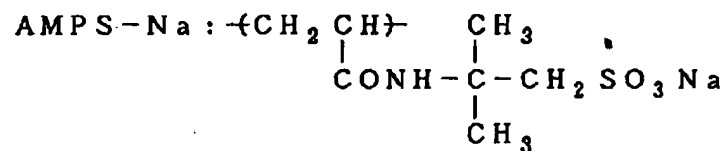
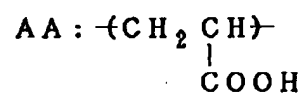
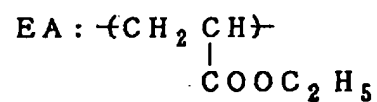
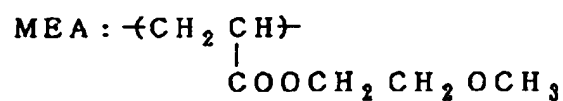
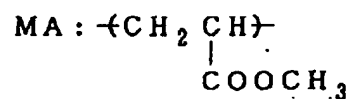
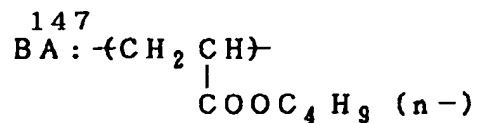
145

146

P-18	(35)	BA	—	50/50
P-19	(35)	BA	—	70/30
P-20	(36)	BA	—	45/55
P-21	(36)	BA	CPAA <sub>m</sub>	50/40/10
P-22	(36)	BA	HEA	50/40/10
P-23	(37)	BA	—	40/60
P-24	(37)	BA	—	50/50
P-25	(38)	BA	MSAEA	60/30/10
P-26	(38)	BA	—	50/50
P-27	(39)	BA	—	25/75
P-28	(40)	—	—	100
P-29	(40)	BA	—	85/15

【0167】

\* \*【表3】

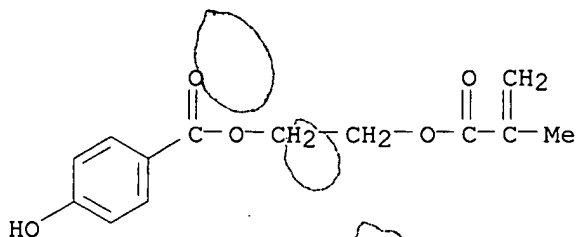


試料No	内 容	第9層～第11層の マゼンタカプラー	第8層の 混色防止剤	層間混色	1) 軟調化
101	比較例	C-4, C-7	Cpd-A	0.12	○
102	比較例	(M-4)	Cpd-A	0.21	×
103	比較例	(M-14)	Cpd-A	0.22	×
104	比較例	(M-48)	Cpd-A	0.21	×
105	本発明	(M-4)	P-18	0.11	○
106	本発明	(M-14)	P-18	0.11	○
107	本発明	(M-48)	P-18	0.10	○
108	本発明	(M-23)	P-20	0.12	○
109	本発明	(M-36)	P-20	0.10	○
110	本発明	(M-40)	P-3	0.11	○
111	本発明	(M-48)	P-6	0.11	○
112	本発明	(M-51)	P-13	0.10	○
113	本発明	(M-54)	P-26	0.12	○

1) 45℃80%RH下にて5日間保存後の、緑感層の特性曲線の軟調化を室温保存のものと比較して記した。

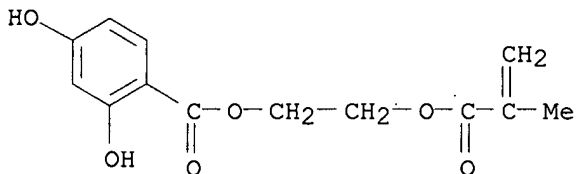
○は軟調化が認められず、×は軟調化が認められたことを表わす。

(9CI) (CA INDEX NAME)



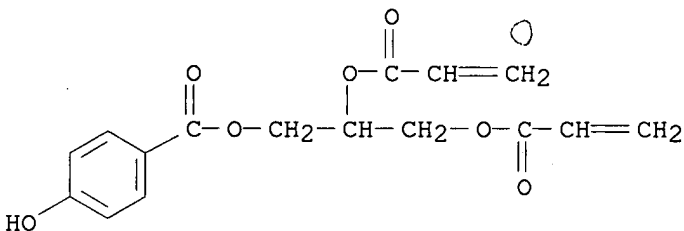
RN 118585-28-7 CAPLUS

CN Benzoic acid, 2,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 145073-38-7 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2,3-bis[(1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 40 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:30123 CAPLUS

DN 118:30123

TI Manufacture of acyloxy-substituted hydroxybenzoate ester derivative for recording material

IN Iwakura, Ken; Fukushige, Yuichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04226945	A2	19920817	JP 1991-136052	19910607
PRAI	JP 1990-150320		19900608		

AB A diacryloxybenzoate ester deriv. I (R1-2 = acyl; Y = alkyl, aralkyl; Z = H, alkyl, halo) is hydrolyzed in the presence of a basic compd. to give I (R1 = H). Thus, Me 2,4-diacetoxybenzoate was hydrolyzed in the presence of NaHCO3 to give Me 2-acetoxy-4-hydroxybenzoate, which is useful for an electron-accepting agent for recording material.

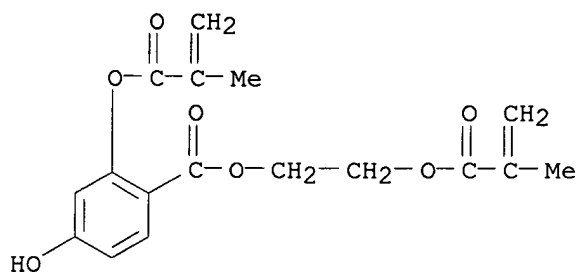
IT 144965-35-5P 144965-39-9P 145102-54-1P

RL: PREP (Preparation)

(prepn. of, for recording material)

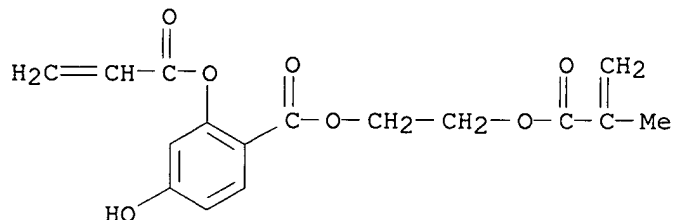
RN 144965-35-5 CAPLUS

CN Benzoic acid, 4-hydroxy-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



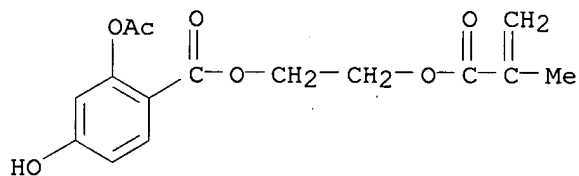
RN 144965-39-9 CAPLUS

CN Benzoic acid, 4-hydroxy-2-[(1-oxo-2-propenyl)oxy]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 145102-54-1 CAPLUS

CN Benzoic acid, 2-(acetyloxy)-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 41 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:7503 CAPLUS

DN 118:7503

TI Resorcinolate derivatives having polymerizable ethylene groups

IN Iwakura, Ken; Fukushima, Yuichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

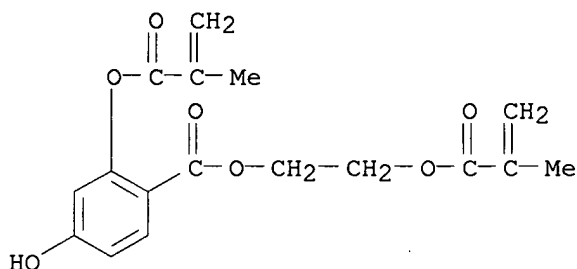
LA Japanese

FAN.CNT 1

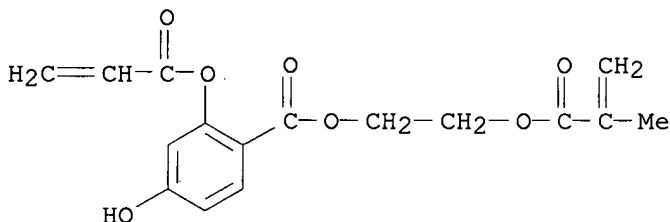
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04226944	A2	19920817	JP 1991-136051	19910607
PRAI	JP 1990-150319		19900608		



OS MARPAT 118:7503  
 AB Title derivs. I [R = (meth)acryloyl; Y = alkyl, aralkyl; Z = H, alkyl, halo] are useful for manuf. of recording materials. Thus, an EtOH soln. contg. 20 g 2,4-dimethacryloyloxybenzoic acid Me ester was treated with an aq. mixt. contg. 10 g NaHCO<sub>3</sub> at 40.degree. for 3 h, pptd., and filtered to give 20 g 2-methacryloyloxy-4-hydroxybenzoic acid Me ester with m.p. 85-86.degree..  
 IT **144965-35-5P 144965-39-9P**  
 RL: PREP (Preparation)  
 (prepn. of, for recording materials)  
 RN 144965-35-5 CAPLUS  
 CN Benzoic acid, 4-hydroxy-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 144965-39-9 CAPLUS  
 CN Benzoic acid, 4-hydroxy-2-[(1-oxo-2-propenyl)oxy]-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 42 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 1992:581867 CAPLUS  
 DN 117:181867  
 TI Photothermal recording materials using polymerizable phenol derivative as electron-acceptor  
 IN Fukushima, Yuichi; Iwakura, Ken; Washisu, Shintaro  
 PA Fuji Shashin Film K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04107558	A2	19920409	JP 1990-227424	19900829
PRAI	JP 1990-227424		19900829		

AB The material consists of a support coated with a recording layer comprising microcapsules contg. electron-donating colorless dye, and phenol deriv. electron-accepting compd. having .gtoreq.2 polymerizable

ethylenic double bond. The material shows high sensitivity and gives stable images.

IT **143963-10-4**, 4-Hydroxybenzoic acid (2-acryloyloxy-3-methacryloxyloxypropyl) ester homopolymer

RL: USES (Uses)

(polymerizable electron-acceptor, photothermal recording material using)

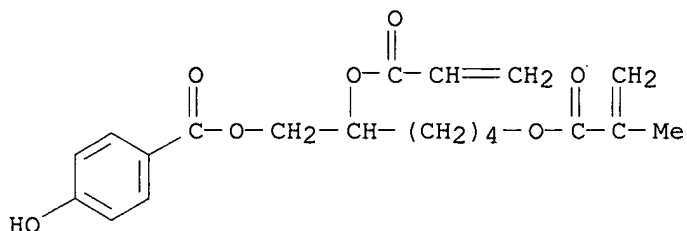
RN 143963-10-4 CAPLUS

CN Benzoic acid, 4-hydroxy-, 6-[(2-methyl-1-oxo-2-propenyl)oxy]-2-[(1-oxo-2-propenyl)oxy]hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 143963-09-1

CMF C20 H24 O7



L46 ANSWER 43 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1992:572270 CAPLUS

DN 117:172270

TI Polymerizable group-terminated hydroxybenzoate derivatives and their manufacture

IN Iwakura, Ken; Fukushige, Yuichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04149155	A2	19920522	JP 1990-273564	19901012
	JP 08032663	B4	19960329		
PRAI	JP 1990-273564		19901012		

OS MARPAT 117:172270

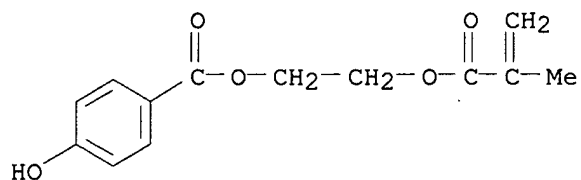
AB The title derivs. I [X = halogen; R = (meth)acryloyloxyalkyl], useful as monomers in manuf. of recording materials, are manufd. by (A) treating I (R = hydroxyalkyl) with (meth)acryloyl halides in polar solvents or (B) halogenation of 4-HOC6H4CO2R. Thus, treating I (X = Cl, R = 3-hydroxypropyl) with methacryloyl chloride in MeCN-N-methylpyrrolidone mixt. at 30.degree. for 8 h gave I (X = Cl, R = 3-methacryloyloxypropyl).

IT **34573-66-5**

RL: RCT (Reactant); RACT (Reactant or reagent)  
(chlorination of)

RN 34573-66-5 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



IT **141889-13-6P**, 2-Methacryloyloxyethyl 3-chloro-4-hydroxybenzoate

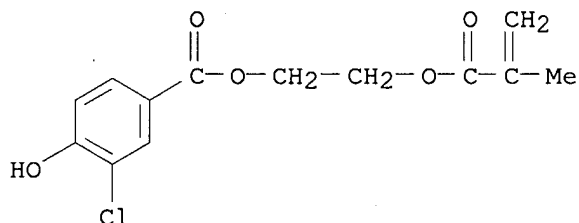
**142177-47-7P 143129-08-2P 143650-87-7P**

RL: PREP (Preparation)

(prepn. of)

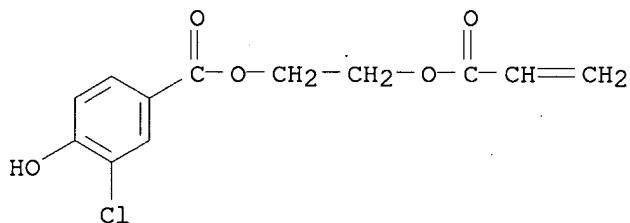
RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



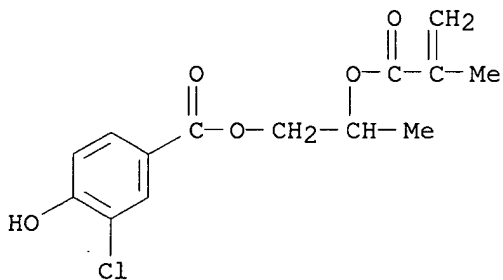
RN 142177-47-7 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



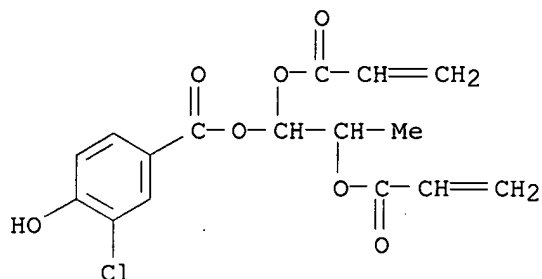
RN 143129-08-2 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



RN 143650-87-7 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 1,2-bis[(1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 44 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1992:561033 CAPLUS

DN 117:161033

TI Light- and heat-sensitive recording material with improved photopolymerization sensitivity

IN Iwakura, Ken; Fukushima, Yuichi; Washisu, Shintaro

PA Fuji Shashin Film K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04075061	A2	19920310	JP 1990-188244	19900717
PRAI	JP 1990-188244		19900717		

AB The title material comprises a support coated with a layer contg. encapsulated electron-donating colorless dye, an electron-accepting compd. having a polymerizable ethylenic group, a photoinitiator, and a bisphenol deriv. I, or polyfunctional phenol deriv. II [R = monovalent group having a polymerizable group; R1 = H, alkyl, alkoxy, halo; Z = (cyclo)alkylene; n = 2, 3]. The material shows high photopolymn. sensitivity. Thus, a substrate was coated with a compn. contg. 3,3-bis(1-octyl-2-methylindole-3-yl)phthalide-encapsulated 2-o-chlorophenyl-4,5-diphenylimidazole dimer, 7-diethylamino-4-methylcoumarine, vinylbenzyl .beta.-resorcyate, and 2,2-bis(4-acryloyloxyphenyl)propane to give a recording material which was stepwise exposed to UV and heated to form clear magenta images with high sensitivity.

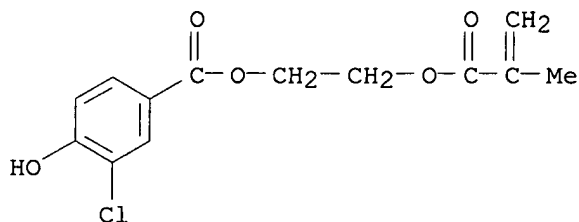
IT 141889-13-6 143158-01-4

RL: USES (Uses)

(light- and heat-sensitive materials contg.)

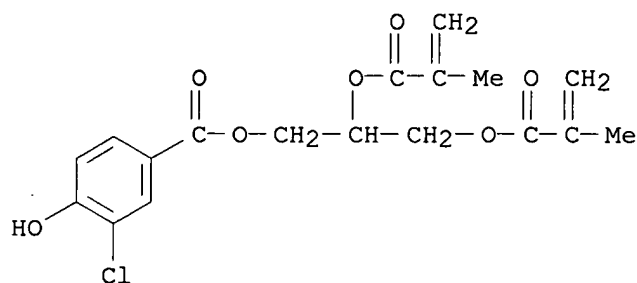
RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 143158-01-4 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2,3-bis[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 45 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1992:521674 CAPLUS

DN 117:121674

TI Recording medium

IN Iwakura, Ken; Fukushige, Yuuichi; Washizu, Shintaro

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 461651	A1	19911218	EP 1991-109723	19910613
	EP 461651	B1	19940216		
	R: DE, GB				
	JP 04226455	A2	19920817	JP 1991-137730	19910610
	JP 2702004	B2	19980121		
	US 5202304	A	19930413	US 1991-714521	19910613
PRAI	JP 1990-156381		19900614		

AB The medium comprises a support with a layer contg. an electron-donating achromatic dye incorporated in microcapsules and an electron-accepting compd., where the electron-accepting compd. is a 3-halo-4-hydroxybenzoic acid ester having a polymerizable ethylene group. The recording medium provides a high color d. at image part, a low fog d. at nonimage part and markedly high stability of the nonimage part.

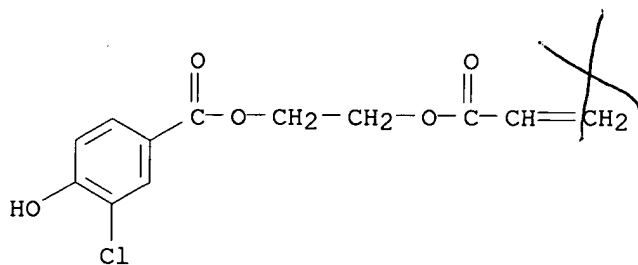
IT **142177-47-7 143129-07-1 143129-08-2**  
**143129-11-7**

RL: USES (Uses)

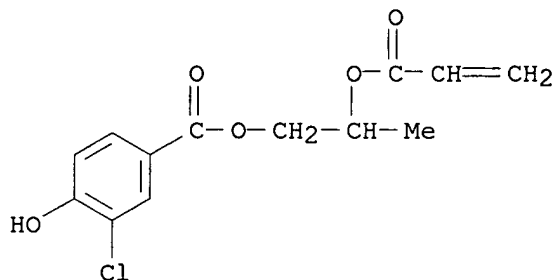
(thermal printing material contg.)

RN 142177-47-7 CAPLUS

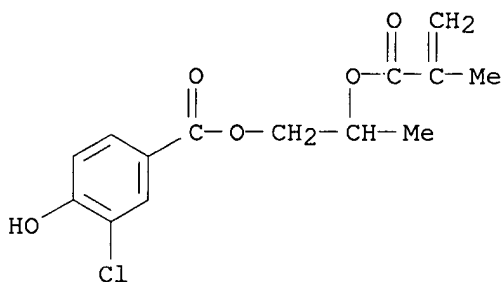
CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



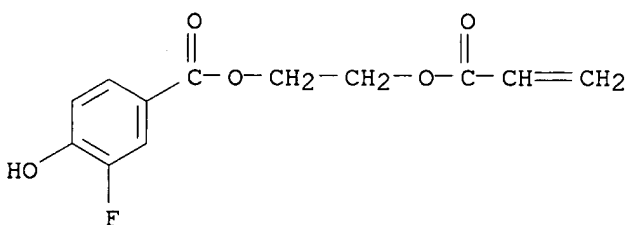
RN 143129-07-1 CAPLUS  
 CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



RN 143129-08-2 CAPLUS  
 CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



RN 143129-11-7 CAPLUS  
 CN Benzoic acid, 3-fluoro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



X

L46 ANSWER 46 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1992:427396 CAPLUS

DN 117:27396

TI Preparation of polymerizable aromatic carboxylic acid esters

IN Fukushima, Yuichi; Iwakura, Ken

PA Fuji Shashin Film K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI JP 04054155 A2 19920221 JP 1990-163123 19900621  
PRAI JP 1990-163123 19900621

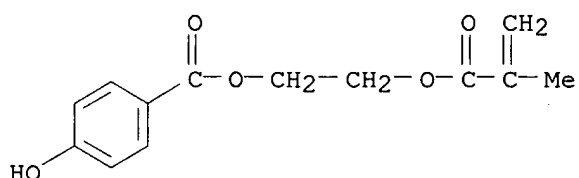
AB The title esters, useful for manuf. of agrochems., dyes, recording materials, etc., are prepd. by reacting polymerizable group-contg. alkyl halides with arom. carboxylic acids in the presence of bases. Thus, a soln. of 3-chloro-4-hydroxybenzoic acid and NaOMe in AcNMe2 was added dropwise to a soln. of 2-bromoethyl methacrylate in AcNMe2 at 75.degree. over 15 min, and stirred for 4 h to give 2-methacryloyloxyethyl 3-chloro-4-hydroxybenzoate.

IT **34573-66-5P 118585-28-7P 141889-13-6P**  
**142177-47-7P**

RL: PREP (Preparation)  
(prepn. of)

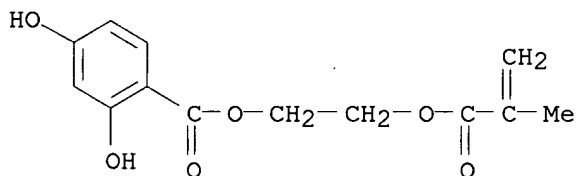
RN 34573-66-5 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



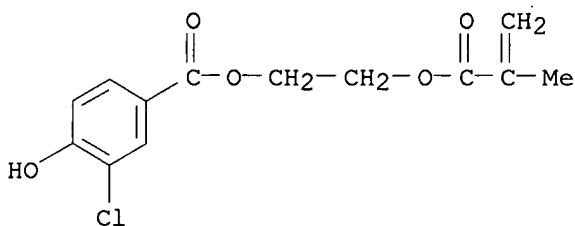
RN 118585-28-7 CAPLUS

CN Benzoic acid, 2,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



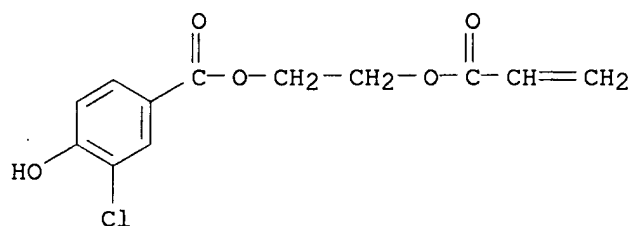
RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 142177-47-7 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 47 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1992:407662 CAPLUS

DN 117:7662

TI Preparation of polymerizable 3-chloro-4-hydroxybenzoic acid derivatives as electron acceptors in recording materials

IN Iwakura, Ken; Fukushima, Yuichi

PA Fuji Shashin Film K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04054150	A2	19920221	JP 1990-163124	19900621
PRAI	JP 1990-163124		19900621		
OS	MARPAT 117:7662				

AB The title derivs. I (R = polymerizable group; X = halo; Y = H, alkyl, alkoxy, acyloxy, OH), useful as electron acceptors in recording materials (no data), are prepd. by halogenation of I (X = H). A soln. of I (R = 3-acryloyloxypropyl, X = Y = H) in CHCl<sub>3</sub> was treated dropwise with SO<sub>2</sub>Cl<sub>2</sub> at 20-25.degree. over 0.5 h and stirred at 25.degree. for 2 h to give I (X = Cl, others as given).

IT **34573-66-5**, 2-Methacryloyloxyethyl 4-hydroxybenzoate

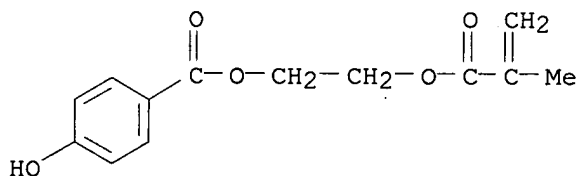
**123426-65-3**, 2-Acryloyloxyethyl 4-hydroxybenzoate

RL: RCT (Reactant); RACT (Reactant or reagent)

(halogenation of)

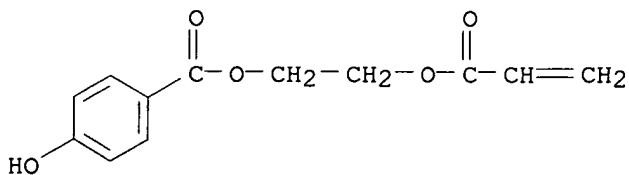
RN 34573-66-5 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

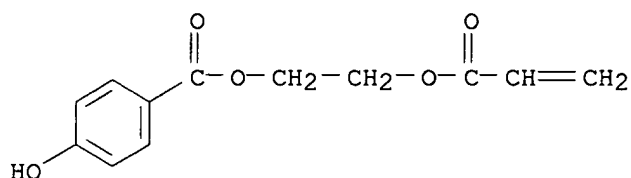


RN 123426-65-3 CAPLUS

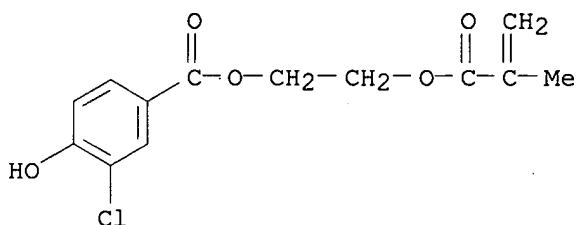
CN Benzoic acid, 4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)







IT **141889-13-6P**, 2-Acryloyloxyethyl 3-chloro-4-hydroxybenzoate  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as electron acceptor for recording materials)  
 RN 141889-13-6 CAPLUS  
 CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
 ester (9CI) (CA INDEX NAME)



L46 ANSWER 48 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 1990:207738 CAPLUS  
 DN 112:207738  
 TI Silver halide color photographic material with reduced staining and fogging  
 IN Hirano, Shigeo; Ono, Shigetoshi; Nakamura, Yoshisada  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 64 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01198742	A2	19890810	JP 1988-23489	19880203
PRAI	JP 1988-23489		19880203		

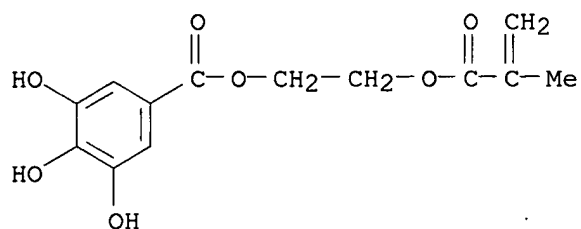
AB The title Ag halide photog. material contains a polymer contg. the repeating unit I [R1 = H, alkyl, halo; R2, R3 = H, a substituent; R4, R5, R6 = OH, a OH-forming group; L1 = a divalent linking group; L2 = SO2NR7, CONR7, NR7SO2, NR7CO, NR7, CO2, OCO; R7 = H, alkyl, aryl; Y = alkylene, arylene; Z = L2, SO2, S, O, alkylene, phenylene; m, n, r = 0, 1].

IT **35442-75-2 126815-58-5 126815-59-6**  
**126815-60-9 126815-68-7 126830-19-1**  
**126830-21-5**  
 RL: USES (Uses)  
 (color photog. material contg., for reduced staining and fogging)

RN 35442-75-2 CAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
 ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6  
 CMF C13 H14 O7



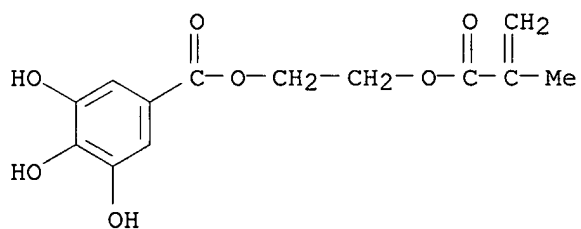
RN 126815-58-5 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

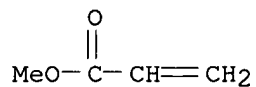
CMF C13 H14 O7



CM 2

CRN 96-33-3

CMF C4 H6 O2



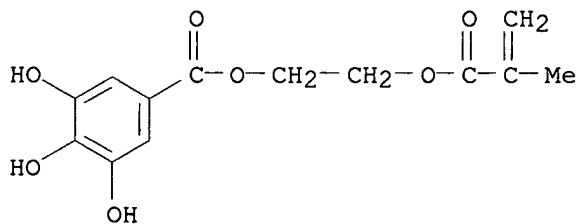
RN 126815-59-6 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

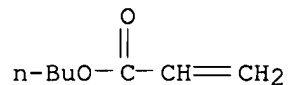
CRN 34573-67-6

CMF C13 H14 O7



CM 2

CRN 141-32-2  
CMF C7 H12 O2

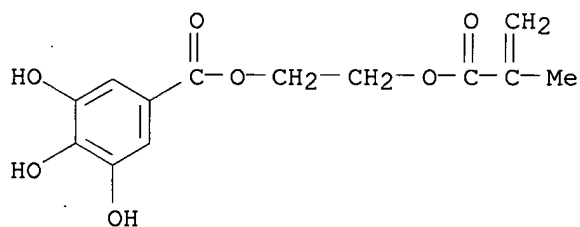


RN 126815-60-9 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with sodium 2-propenoate (9CI) (CA INDEX NAME)

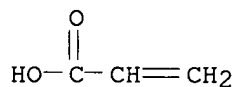
CM 1

CRN 34573-67-6  
CMF C13 H14 O7



CM 2

CRN 7446-81-3  
CMF C3 H4 O2 . Na



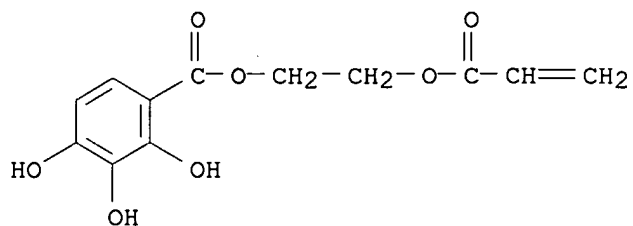
● Na

RN 126815-68-7 CAPLUS

CN Benzoic acid, 2,3,4-trihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-methoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

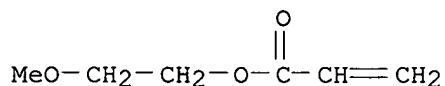
CRN 126815-67-6  
CMF C12 H12 O7



CM 2

CRN 3121-61-7

CMF C6 H10 O3



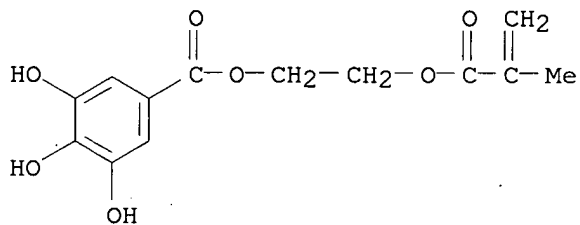
RN 126830-19-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

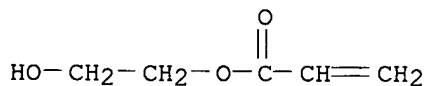
CMF C13 H14 O7



CM 2

CRN 818-61-1

CMF C5 H8 O3

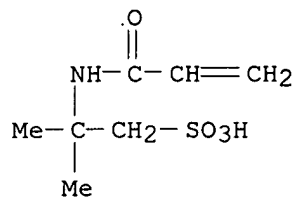


RN 126830-21-5 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monopotassium salt and potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

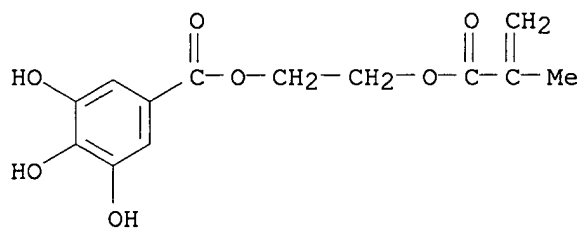
CRN 52825-28-2  
CMF C7 H13 N O4 S . K



● K

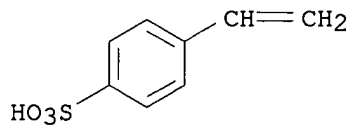
CM 2

CRN 34573-67-6  
CMF C13 H14 O7



CM 3

CRN 4551-90-0  
CMF C8 H8 O3 S . K



● K

L46 ANSWER 49 OF 71 CAPLUS COPYRIGHT 2003 ACS  
AN 1990:148935 CAPLUS  
DN 112:148935  
TI Silver halide color photographic materials with reduced color fog  
IN Ono, Shigetoshi; Oki, Nobutaka; Nakamura, Yoshisada  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 48 pp.  
CODEN: JKXXAF  
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01134448	A2	19890526	JP 1987-294676	19871120
PRAI	JP 1987-294676		19871120		

AB The title materials contain .gtoreq.1 (co)polymers of repeating unit I, with C.gtoreq.8 end group [R1 = H, alkyl, halogen; R2-4 = H, halogen, CN, sulfo, carboxy, (un)substituted alkyl, acylamino, acyl, sulfonamido, alkoxy, aryloxy, amino, alkylthio, arylthio, carbamoyl, carboamoylamino, sulfamoyl, sulfamoylamino, alkoxy carbonyl, aryloxy carbonyl, alkylsulfonyl, arylsulfonyl, alkoxy sulfonyl, aryloxy sulfonyl (R2-4 may form together with neighboring group a condensed carbocyclic or heterocyclic ring); L1 = divalent linking group; L2 = Sb2Nb5, CONR5, NR5SO2, NR5CO, NR5, CO2, O2C; R5 = H, (un)substituted alkyl, Ph; Y = (un)substituted alkylene, arylene, aralkylene; Z = SO2NR5, CONR5, NR5SO2, NR5CO, NR5; CO2, O2C, SO2, S, O, alkylene, phenylene, aralkylene; G1, G2 = OH or hydrolyzable precursor; G3 = sulfonamide, carbonamide group; m, n, p, q, r = 1, 0; when p = 1, q = 0; when p = 0, q = 1].

IT 125900-83-6P

RL: PREP (Preparation)

(manufg. and use of, as fog inhibitors, for color photog. materials)

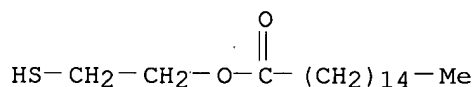
RN 125900-83-6 CAPLUS

CN Benzoic acid, 2,5-dihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, telomer with butyl 2-propenoate and 2-mercaptoethyl hexadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 30093-91-5

CMF C18 H36 O2 S



CM 2

CRN 125900-82-5

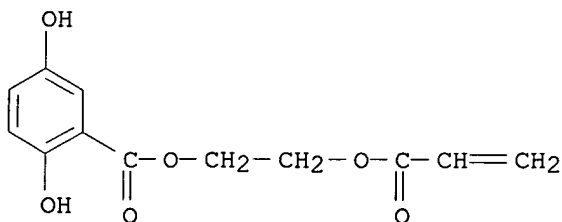
CMF (C12 H12 O6 . C7 H12 O2)x

CCI PMS

CM 3

CRN 125900-81-4

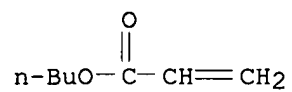
CMF C12 H12 O6



CM 4

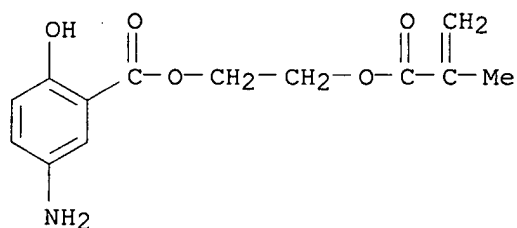
CRN 141-32-2

CMF C7 H12 O2



=>

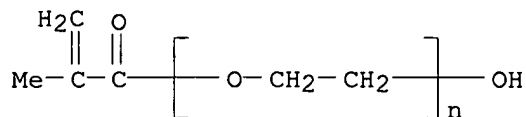
L46 ANSWER 12 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 2002:43197 CAPLUS  
 DN 137:190556  
 TI Synthesis and characterization of methacrylic derivatives of  
 5-aminosalicylic acid with pH-sensitive swelling properties  
 AU Davaran, S.; Rashidi, M. R.; Hashemi, M.  
 CS Dep. of Pharm. Chem., Fac. of Pharm., Tabriz Univ. of Med. Sci., Tabriz,  
 Iran  
 SO AAPS PharmSciTech (2001), 2(4), No pp. given  
 CODEN: AAPHFZ; ISSN: 1522-1059  
 URL: <http://www.aapspharmscitech.org/scientificjournals/pharmscitech/volume2issue4/1056/manuscript.htm>  
 PB American Association of Pharmaceutical Scientists  
 DT Journal; (online computer file)  
 LA English  
 AB The purpose of this study was to develop novel colon-specific drug  
 delivery systems with pH-sensitive swelling and drug release properties.  
 Methacrylic-type polymeric prodrugs with different content levels of  
 5-aminosalicylic acid (5-ASA) were synthesized by free radical copolymn.  
 of methacrylic acid (MAA), polyethylene glycol monomethacrylate (PEGMA),  
 and a methacrylic deriv. of 5-ASA (methacryloyloxyethyl 5-aminosalicylate  
 [MOES]). The copolymers were characterized, and the drug content of the  
 copolymers was detd. The effect of copolymer compn. on the swelling  
 behavior and hydrolytic degrdn. was studied in simulated gastric fluid  
 (SGF, pH 1.2) and simulated intestinal fluid (SIF, pH 7.2). The swelling  
 and hydrolytic behavior of the copolymers was dependent on the content of  
 MAA groups and caused a decrease in gel swelling in SGF or an increase in  
 gel swelling in SIF. Drug release studies showed that increasing content  
 of MAA in the copolymer enhances the hydrolysis in SIF but has no effect  
 in SGF. Hydrogen-bond complexes are formed between MAA and PEG pendant  
 groups and that these pH-sensitive systems could be useful for prepn. of a  
 controlled-release formulation of 5-ASA.  
 IT **449764-47-0P**  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and characterization of methacrylic derivs. of aminosalicylic  
 acid with pH-sensitive swelling properties)  
 RN 449764-47-0 CAPLUS  
 CN Benzoic acid, 5-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
 ester, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-  
 hydroxypoly(oxy-1,2-ethanediyl) and 2-methyl-2-propenoic acid (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 228412-51-9  
 CMF C13 H15 N O5



CM 2

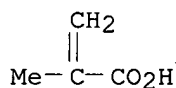


CRN 25736-86-1  
 CMF (C2 H4 O)n C4 H6 O2  
 CCI PMS



CM 3

CRN 79-41-4  
 CMF C4 H6 O2



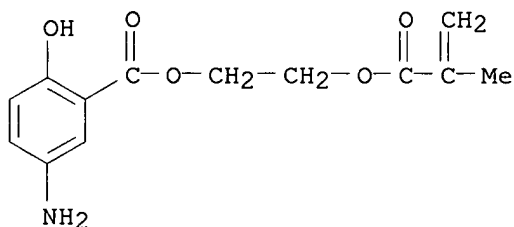
IT **228412-51-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP. (Preparation); RACT (Reactant or reagent)

(prepn. and characterization of methacrylic derivs. of aminosalicyclic acid with pH-sensitive swelling properties)

RN 228412-51-9 CAPLUS

CN Benzoic acid, 5-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 13 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:595411 CAPLUS

DN 135:172948

TI Silver halide light-sensitive material containing tanning developing agent

IN Makino, Naonori; Sakata, Kaku

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 93 pp.

CODEN: EPXXDW

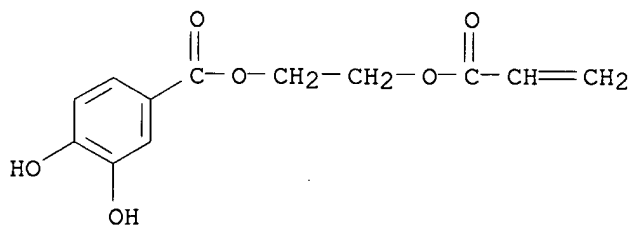
DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1124157	A2	20010816	EP 2001-102148	20010201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

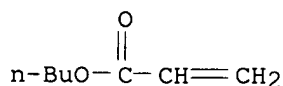
	JP 2001215711	A2	20010810	JP 2000-24437	20000201
	JP 2001215732	A2	20010810	JP 2000-24438	20000201
	JP 2001305739	A2	20011102	JP 2000-125204	20000426
	JP 2002006437	A2	20020109	JP 2000-183174	20000619
PRAI	JP 2000-24437	A	20000201		
	JP 2000-24438	A	20000201		
	JP 2000-125204	A	20000426		
	JP 2000-183174	A	20000619		
OS	MARPAT 135:172948				
AB	A silver halide light-sensitive material comprises a support and a silver halide gelatin emulsion layer. The silver halide gelatin emulsion layer or an optionally provided hydrophilic layer contains a tanning developing agent. According to the first embodiment of the present invention, the tanning developing agent has a mol. structure in which two to six benzenediol or benzenetriol rings are connected with a linking group. According to the second embodiment of the invention, the tanning developing agent consists of a polymer having side chains contg. benzenediol or benzenetriol rings. According to the third embodiment of the invention, the tanning developing agent consists of a benzenediol or benzenetriol ring having an aliph. substituent group having 5 to 40 carbon atoms or an arom. substituent group having 7 to 40 carbon atoms. A tanning developing soln. and a lithog. printing plate are also disclosed.				
IT	<b>353498-75-6 353498-77-8 353498-79-0</b> <b>353498-80-3 353498-87-0 353498-88-1</b>				
	RL: TEM (Technical or engineered material use); USES (Uses) (Silver halide light-sensitive material contg. tanning developing agent)				
RN	353498-75-6 CAPLUS				
CN	Benzoic acid, 3,4-dihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)				
CM	1				
CRN	353498-74-5				
CMF	C12 H12 O6				



CM 2

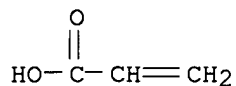
CRN 141-32-2

CMF C7 H12 O2



CM 3

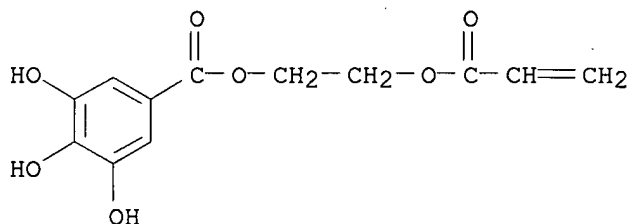
CRN 79-10-7  
CMF C3 H4 O2



RN 353498-77-8 CAPLUS  
CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester,  
polymer with 2-methyl-2-propenoic acid and propyl 2-methyl-2-propenoate  
(9CI) (CA INDEX NAME)

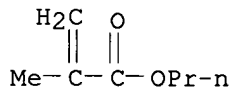
CM 1

CRN 353498-76-7  
CMF C12 H12 O7



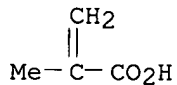
CM 2

CRN 2210-28-8  
CMF C7 H12 O2



CM 3

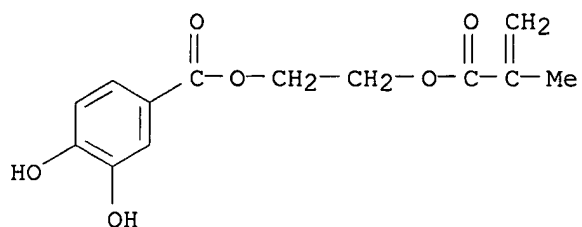
CRN 79-41-4  
CMF C4 H6 O2



RN 353498-79-0 CAPLUS  
CN Benzoic acid, 3,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
ester, polymer with butyl 2-methyl-2-propenoate and 2-propenoic acid (9CI)  
(CA INDEX NAME)

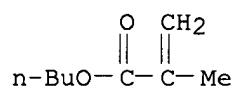
CM 1

CRN 123426-67-5  
CMF C13 H14 O6



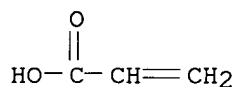
CM 2

CRN 97-88-1  
CMF C8 H14 O2



CM 3

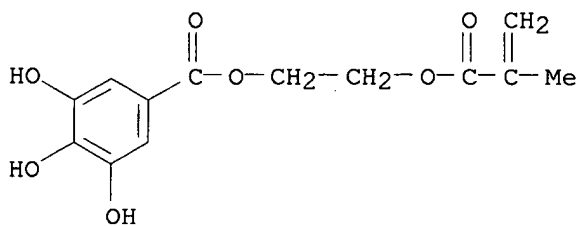
CRN 79-10-7  
CMF C3 H4 O2



RN 353498-80-3 CAPLUS  
CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with dodecyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

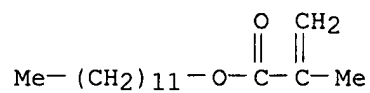
CM 1

CRN 34573-67-6  
CMF C13 H14 O7



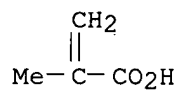
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

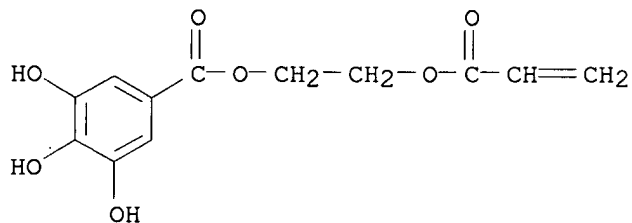
CRN 79-41-4  
CMF C4 H6 O2



RN 353498-87-0 CAPLUS  
CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester,  
polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic  
acid (9CI) (CA INDEX NAME)

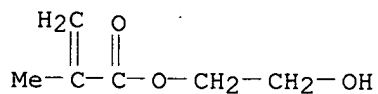
CM 1

CRN 353498-76-7  
CMF C12 H12 O7



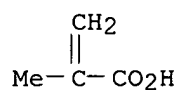
CM 2

CRN 868-77-9  
CMF C6 H10 O3



CM 3

CRN 79-41-4  
CMF C4 H6 O2



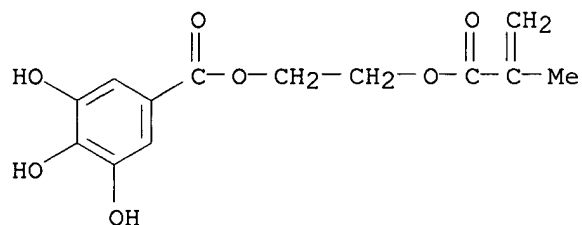
RN 353498-88-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

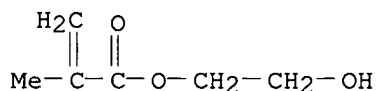
CMF C13 H14 O7



CM 2

CRN 868-77-9

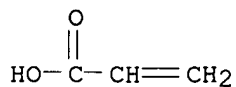
CMF C6 H10 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2



L46 ANSWER 14 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:579384 CAPLUS

DN 135:173004

TI Tanning developer in tanning development solution for silver halide photographic materials and method for producing relief image for lithographic printing plate using same

IN Makino, Tadanori; Sakata, Itaru

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

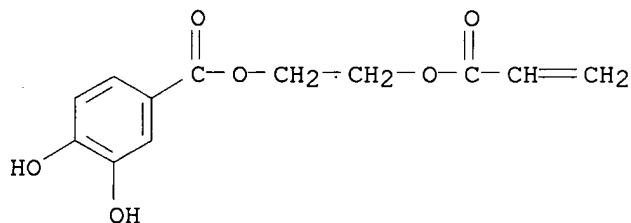
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001215732	A2	20010810	JP 2000-24438	20000201
	EP 1124157	A2	20010816	EP 2001-102148	20010201
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2001051314	A1	20011213	US 2001-774589	20010201
	US 6479198	B2	20021112		
PRAI	JP 2000-24437	A	20000201		
	JP 2000-24438	A	20000201		
	JP 2000-125204	A	20000426		
	JP 2000-183174	A	20000619		
AB	The title tanning developer contains a polymer having side chain contg. 2-6 benznediol rings or benzenetriol rings. The tanning developer provides the harden gelatin image having the high lipophilicity and the good durability as a lithog. plate.				
IT	<b>353498-75-6 353498-77-8 353498-79-0</b> <b>353498-80-3 353498-87-0 353498-88-1</b>				
	RL: TEM (Technical or engineered material use); USES (Uses) (tanning developer in tanning development soln.)				
RN	353498-75-6 CAPLUS				
CN	Benzoic acid, 3,4-dihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)				

CM 1

CRN 353498-74-5

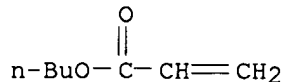
CMF C12 H12 O6



CM 2

CRN 141-32-2

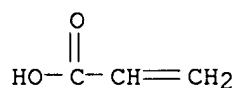
CMF C7 H12 O2



CM 3

CRN 79-10-7

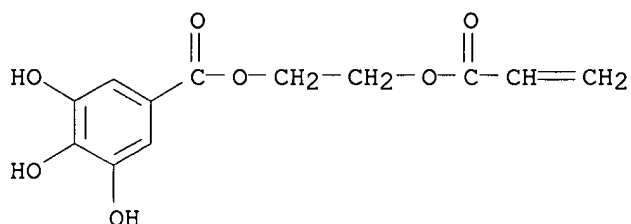
CMF C3 H4 O2



RN 353498-77-8 CAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester,  
 polymer with 2-methyl-2-propenoic acid and propyl 2-methyl-2-propenoate  
 (9CI) (CA INDEX NAME)

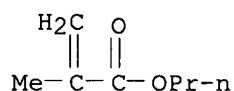
CM 1

CRN 353498-76-7  
 CMF C12 H12 O7



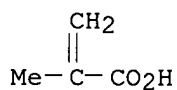
CM . 2

CRN 2210-28-8  
 CMF C7 H12 O2



CM 3

CRN 79-41-4  
 CMF C4 H6 O2

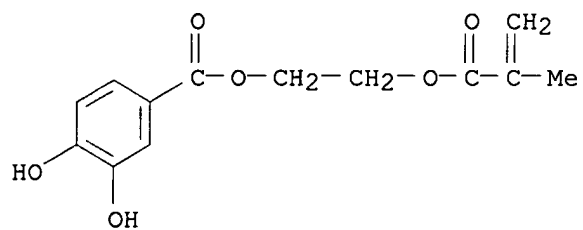


RN 353498-79-0 CAPLUS  
 CN Benzoic acid, 3,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
 ester, polymer with butyl 2-methyl-2-propenoate and 2-propenoic acid (9CI)  
 (CA INDEX NAME)

CM 1

CRN 123426-67-5  
 CMF C13 H14 O6

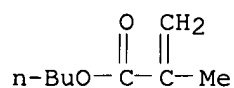




CM 2

CRN 97-88-1

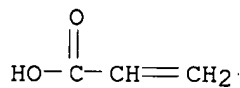
CMF C8 H14 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



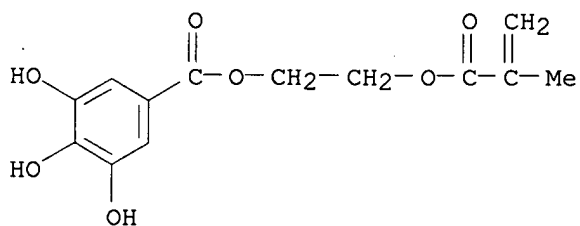
RN 353498-80-3 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with dodecyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

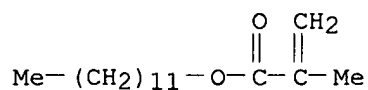
CMF C13 H14 O7



CM 2

CRN 142-90-5

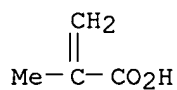
CMF C16 H30 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



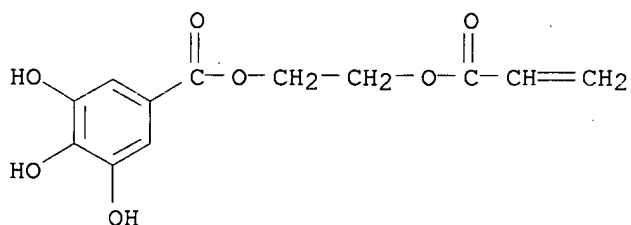
RN 353498-87-0 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 353498-76-7

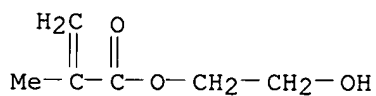
CMF C12 H12 O7



CM 2

CRN 868-77-9

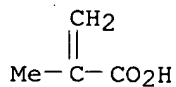
CMF C6 H10 O3



CM 3

CRN 79-41-4

CMF C4 H6 O2

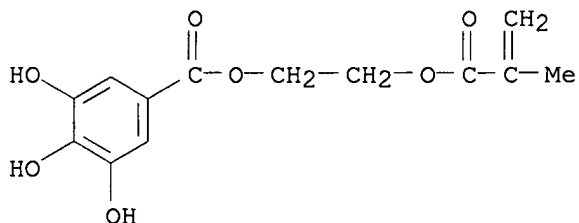


RN 353498-88-1 CAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

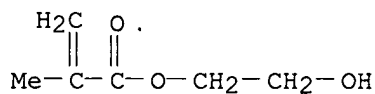
CMF C13 H14 O7



CM 2

CRN 868-77-9

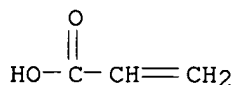
CMF C6 H10 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2



L46 ANSWER 15 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:524739 CAPLUS

DN 135:114444

TI Electron beam or x-ray negative-working resist composition

IN Aoi, Toshiaki; Adegawa, Yutaka; Yagihara, Morio

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 85 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1117004	A2	20010718	EP 2001-100113	20010112

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2001337452 A2 20011207 JP 2001-5374 20010112  
 PRAI JP 2000-4766 A 20000113  
 JP 2000-84469 A 20000324

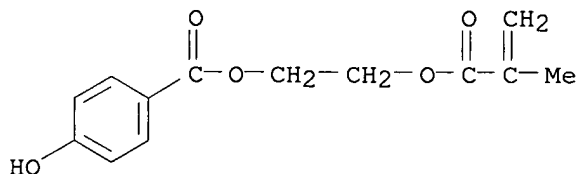
AB The invention relates to a neg.-working resist compn. useful for super microlithog. such as VLSI and high-capacity microchips and to a compn. capable of forming microfine patterns using X-rays and an electron beam, and to a compn. suitable for working of semiconductor devices using an electron beam. A neg.-working resist compn. for electron beams or x-rays comprises (a) a compd. generating an acid and/or radical species by the irradiation of electron beams or x-rays, (b) a resin which is insol. in H<sub>2</sub>O and sol. in an alkali aq. soln., (c) a crosslinking agent causing crosslinking with the resin of component (b) by the action of an acid, and (d) a compd. having .gtoreq.1 unsatd. bond capable of being polymd. by an acid and/or a radical, and a neg.-working resist compn. for electron beams or x-rays comprising (a) a compd. generating an acid and/or radical species by the irradiation of electron beams or x-rays, (b') a resin having .gtoreq.1 unsatd. bond polymerizable by an acid and/or an alkali, which is insol. in H<sub>2</sub>O but sol. in an alkali aq. soln., and (c) a crosslinking agent causing crosslinking with the resin (b') by the action of an acid are disclosed.

IT **349647-07-0P**  
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (synthesis of alkali-sol. resin for neg.-working photoresist compn. for X-ray or electron beam lithog.)

RN 349647-07-0 CAPLUS  
 CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

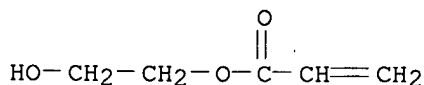
CM 1

CRN 34573-66-5  
 CMF C13 H14 O5



CM 2

CRN 818-61-1  
 CMF C5 H8 O3



CM 3

CRN 107-13-1  
 CMF C3 H3 N



L46 ANSWER 16 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:414680 CAPLUS

DN 135:38887

TI Positive-working two-layered resist

IN Yasunami, Shoichiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001154359	A2	20010608	JP 1999-338300	19991129
PRAI	JP 1999-338300		19991129		

AB The title two-layered resist consists of a first resist layer on a substrate and a second resist layer on the first resist layer. The first resist layer is made of polymer  $[\text{CH}_2-\text{C}(\text{Y}_1)\text{COO}(\text{L}_1)\text{b}-(\text{L}_2)\text{c}-\text{J}]$  ( $\text{Y}_1 = \text{H}$ , alkyl, CN, halo;  $\text{L}_1-2 = 2$ -valent connecting group;  $\text{J} = \text{Ph}$ , naphthyl, biphenyl, etc.;  $\text{b}, \text{c} = 0, 1$ ). The second resist layer is made of polymer  $[\text{CH}_2-\text{C}(\text{Y}_2)-\text{L}-\text{COO}(\text{CH}_2)_2-\text{Si}(\text{R}_2)(\text{R}_3)(\text{R}_4)]$  ( $\text{Y}_2 = \text{H}$ , alkyl, CN, halo;  $\text{R}_2-4 = \text{alkyl}$ ,  $\text{Ph}$ , trialkylsilyl, trialkylsilyloxy;  $\text{L} = \text{single bond}$ , 2-valent connecting group). The two-layered photoresist, each of which layer is made of the specific polymers, provides the improved contact between resist layers to provides the high resoln. and the good pattern profile.

IT **341972-77-8P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymer in the first layer of pos.-working two-layered resist)

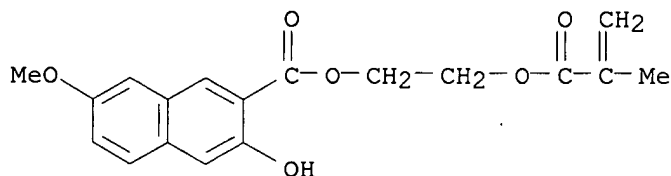
RN 341972-77-8 CAPLUS

CN 2-Naphthalenecarboxylic acid, 3-hydroxy-7-methoxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 341972-76-7

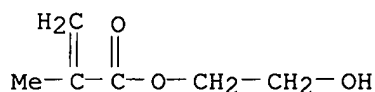
CMF C18 H18 O6



CM 2

CRN 868-77-9

CMF C6 H10 O3



L46 ANSWER 17 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:390345 CAPLUS

DN 135:12123

TI Positive-working resist laminate and fine pattern forming method using it

IN Yasunami, Shoichiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001147538	A2	20010529	JP 1999-331568	19991122
PRAI	JP 1999-331568		19991122		

AB In the laminate comprising a support successively coated with 1st resist layer and 2nd resist layer, (i) the 1st resist layer is heat-curable and contains a polymer having a repeating unit  $\text{CH}_2\text{R}_1(\text{CO}_2)\text{aL}_1\text{bL}_2\text{cM}$  ( $\text{R}_1 = \text{H}$ , alkyl, halo;  $\text{L}_1\text{-L}_2 =$  divalent linkage;  $\text{M} =$  arom. ring;  $\text{a}, \text{b}, \text{c} = 0, 1$ ) and (ii) the 2nd layer contains (a) a polysiloxane or polysilsesquioxane having an acid-decomposable group and its soly. in an alkali developer increases by the action of an acid, and (b) a compd. generating an acid by irradiation of an actinic ray or radiation. The fine pattern is formed by (1) forming the 1st resist layer on the substrate and curing it by heat, (2) forming the 2nd resist layer on the 1st resist layer and patternwise exposing it with an actinic ray or radiation and alkali developing the 2nd layer, and (3) etching the 1st resist layer using the 2nd resist layer as a mask. The laminate is suited for far UV exposure, shows high resolu. and gives high accurate fine patterns and is useful for manuf. of semiconductor devices.

IT 341972-77-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(pos.-working resist laminate comprising 1st layer contg. acrylic polymer and 2nd layer contg. polysiloxane and acid generator)

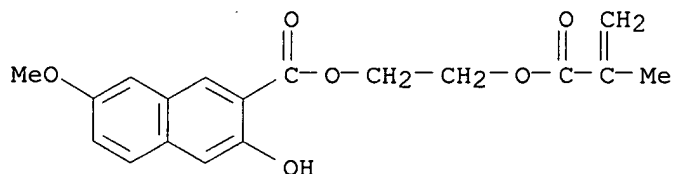
RN 341972-77-8 CAPLUS

CN 2-Naphthalenecarboxylic acid, 3-hydroxy-7-methoxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

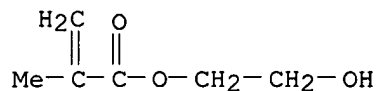
CRN 341972-76-7

CMF C18 H18 O6



CM 2

CRN 868-77-9  
CMF C6 H10 O3



L46 ANSWER 18 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:280490 CAPLUS

DN 134:318703

TI Hardenable resin composition for photoresist and lithographic printing plate

IN Shimada, Kazuto; Kunita, Kazuhito

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001109143	A2	20010420	JP 1999-281143	19991001
PRAI	JP 1999-281143		19991001		

AB The hardenable resin compn. comprises (a) a compd. capable releasing an acid and a crosslinking agent upon receiving energy and (b) a compd. having .gtoreq.2 functional group reactive with the crosslinking agent under the presence of an acid. This resin compn. showed high storage stability and high sensitivity.

IT **223558-08-5**

RL: TEM (Technical or engineered material use); USES (Uses)

(hardenable resin compn. for photoresist and lithog. printing plate)

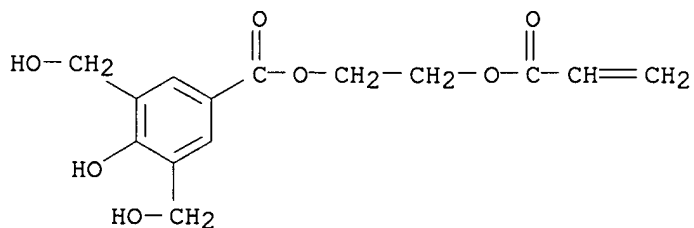
RN 223558-08-5 CAPLUS

CN Benzoic acid, 4-hydroxy-3,5-bis(hydroxymethyl)-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 223558-07-4

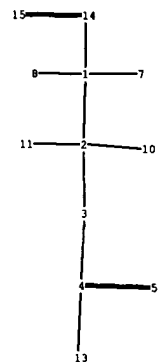
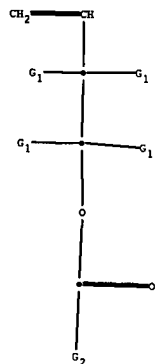
CMF C14 H16 O7



CM 2

CRN 80-62-6

CMF C5 H8 O2



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 15

chain bonds :

1-2 1-7 1-8 1-14 2-3 2-10 2-11 3-4 4-5 4-13 14-15

exact/norm bonds :

1-7 1-8 2-3 2-10 2-11 3-4 4-5 4-13

exact bonds :

1-2 1-14 14-15

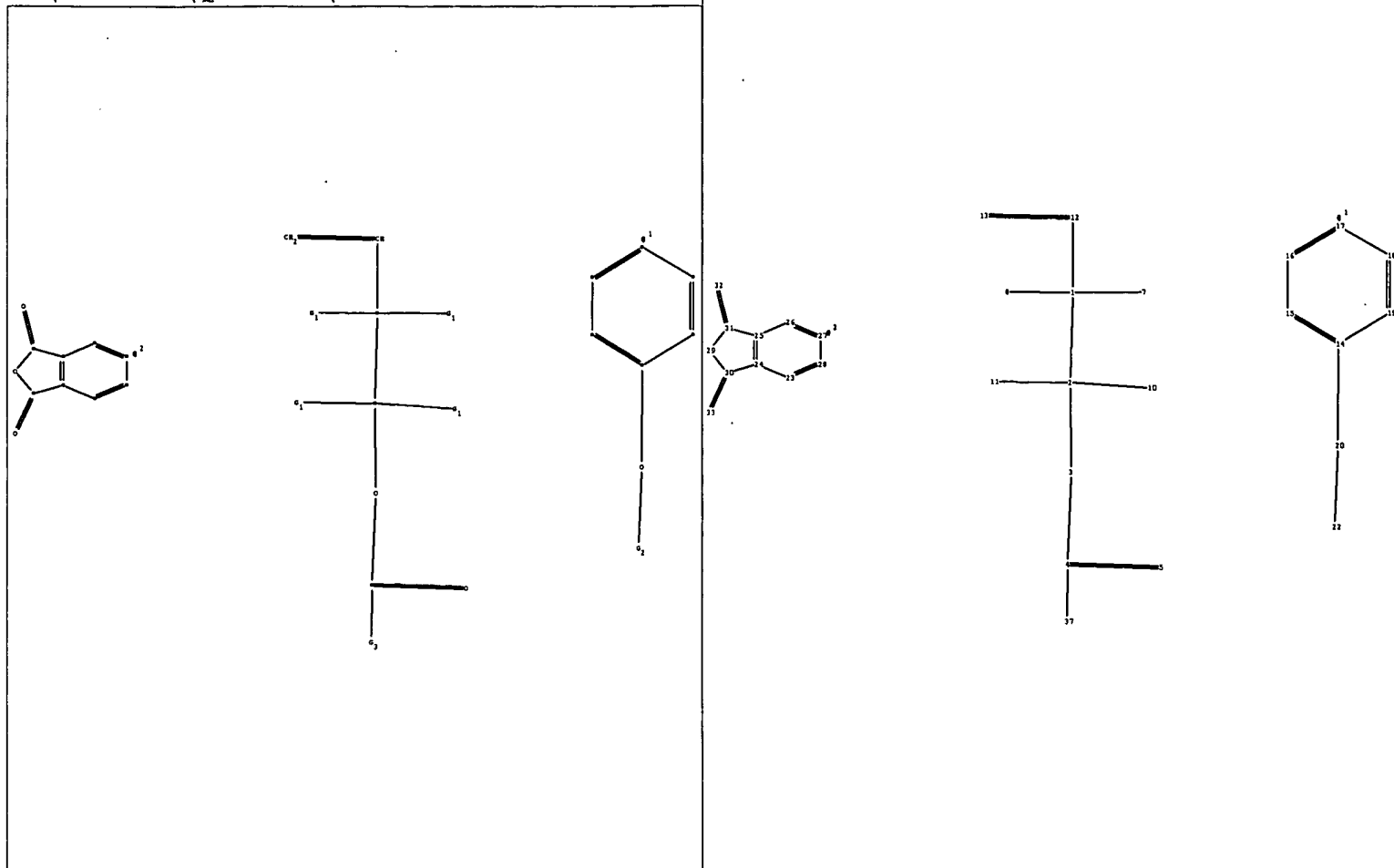
G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:CLASS





chain nodes :

1 2 3 4 5 7 8 10 11 12 13 20 22 32 33 37

ring nodes :

14 15 16 17 18 19 23 24 25 26 27 28 29 30 31

chain bonds :

1-2 1-7 1-8 1-12 2-3 2-10 2-11 3-4 4-5 4-37 12-13 14-20 20-22  
30-33 31-32

ring bonds :

14-15 14-19 15-16 16-17 17-18 18-19 23-24 23-28 24-30 24-25  
25-26 25-31 26-27 27-28 29-31 29-30

exact/norm bonds :

1-7 1-8 2-3 2-10 2-11 3-4 4-5 4-37 14-20 20-22 24-30 25-31  
29-31 29-30 30-33 31-32

exact bonds :

1-2 1-12 12-13

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19 23-24 23-28 24-25 25-26  
26-27 27-28

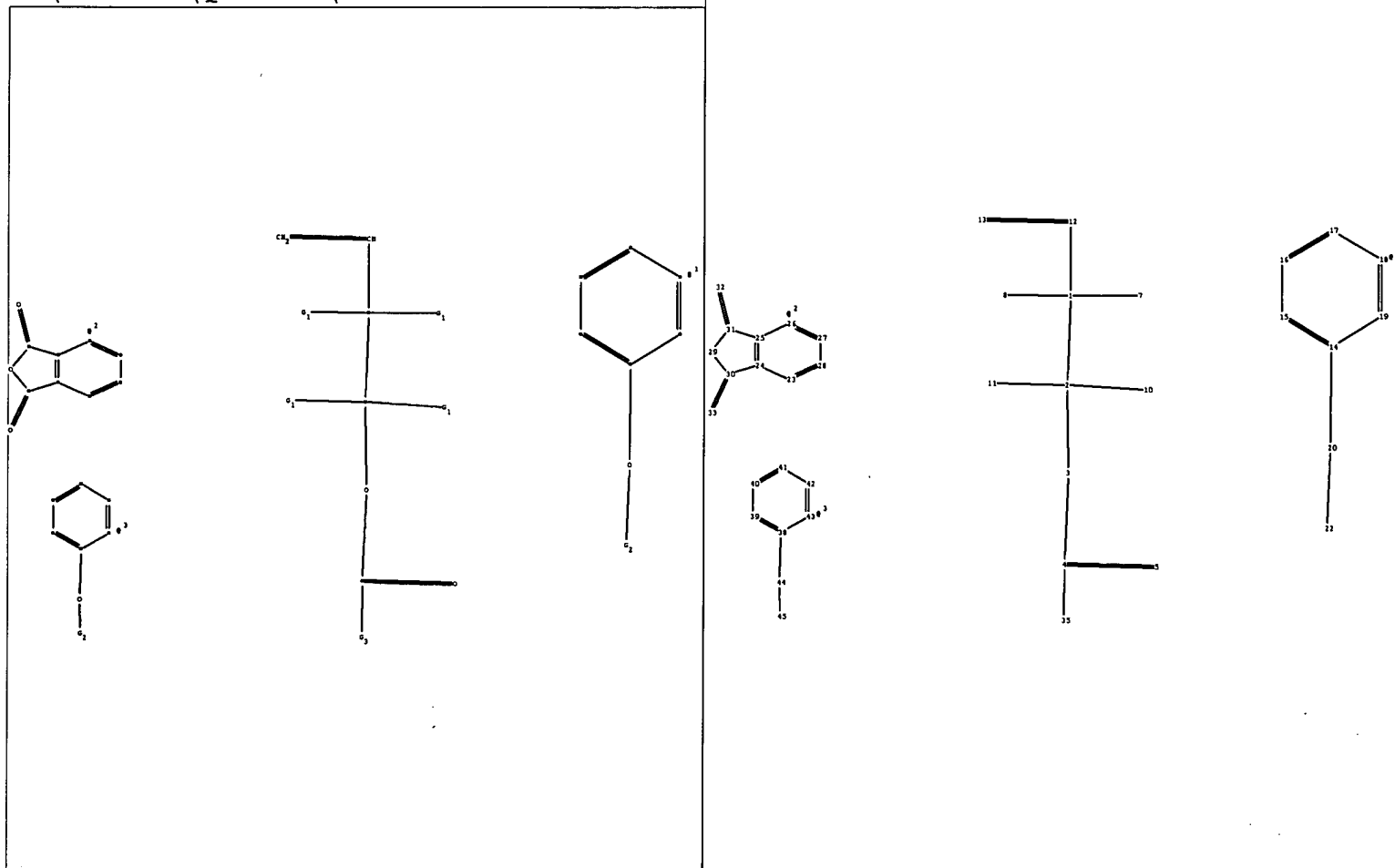
G1:H,OH,Ak

G2:H,Ak

G3:[\*1],[\*2]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:Atom 8:CLASS 10:CLASS  
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom  
19:Atom 20:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom  
28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 37:Atom



chain nodes :

. 1 2 3 4 5 7 8 10 11 12 13 20 22 32 33 35 44 45

ring nodes :

14 15 16 17 18 19 23 24 25 26 27 28 29 30 31 38 39 40  
41 42 43

chain bonds :

1-2 1-7 1-8 1-12 2-3 2-10 2-11 3-4 4-5 4-35 12-13 14-20 20-22  
30-33 31-32 38-44 44-45

ring bonds :

14-15 14-19 15-16 16-17 17-18 18-19 23-24 23-28 24-30 24-25  
25-26 25-31 26-27 27-28 29-31 29-30 38-39 38-43 39-40 40-41  
41-42 42-43

exact/norm bonds :

1-7 1-8 2-3 2-10 2-11 3-4 4-5 4-35 14-20 20-22 24-30 25-31  
29-31 29-30 30-33 31-32 38-44 44-45

exact bonds :

1-2 1-12 12-13

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19 23-24 23-28 24-25 25-26  
26-27 27-28 38-39 38-43 39-40 40-41 41-42 42-43

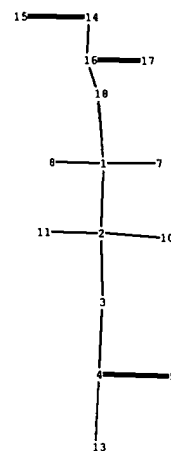
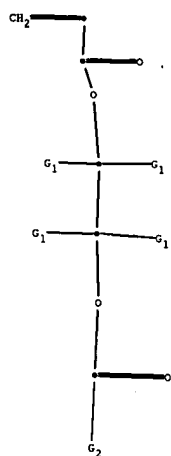
G1:H,OH,Ak

G2:H,Ak

G3:[\*1],[\*2],[\*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:Atom 8:CLASS 10:CLASS  
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom  
19:Atom 20:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom  
28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 35:Atom 38:CLASS  
39:CLASS 40:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:Atom



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 15 16 17 18

chain bonds :

1-2 1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 14-15 14-16 16-17  
16-18

exact/norm bonds :

1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 16-17 16-18

exact bonds :

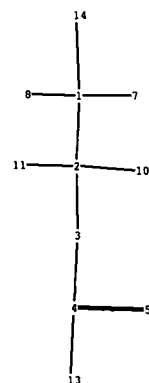
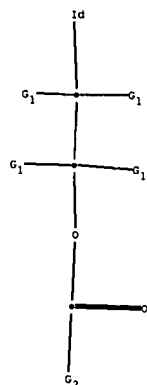
1-2 14-15 14-16

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS



chain nodes :

1 2 3 4 5 7 8 10 11 13 14

chain bonds :

1-2 1-7 1-8 1-14 2-3 2-10 2-11 3-4 4-5 4-13

exact/norm bonds :

1-7 1-8 1-14 2-3 2-10 2-11 3-4 4-5 4-13

exact bonds :

1-2

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS

AN 2002:699500 CAPLUS

DN 137:353580

TI Semifluorinated Aromatic Side-Group Polystyrene-Based Block Copolymers:  
Bulk Structure and Surface Orientation Studies

AU Li, Xuefa; Andruzzi, Luisa; Chiellini, Emo; Galli, Giancarlo; Ober,  
Christopher K.; Hexemer, Alexander; Kramer, Edward J.; Fischer, Daniel A.

CS Department of Materials Science and Engineering, Cornell University,  
Ithaca, NY, 14853, USA

SO Macromolecules (2002), 35(21), 8078-8087

CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB Two families of narrow polydispersity poly(styrene)-based block copolymers bearing side groups contg. both a Ph ring and a para-linked semi-fluorinated side group were designed to produce stable low energy surfaces. The effects of the Ph ring on the surface and bulk structure of the materials were investigated. The semi-fluorinated side chains were found to self-assemble into liq.-cryst. smectic layers within the microphase domains. An unexpected enhancement of surface organization by the arom. group was obsd. The bulk morphol. and the interplay between microphase sepn. and liq. cryst. self-assembly were examd. using transmission electron microscopy and X-ray scattering. Near-edge X-ray absorption fine structure (NEXAFS) studies were used to probe the surface coverage of the fluorinated segments. NEXAFS also allowed the detn. of the orientation parameters (SC-F and S.pi.\*) of the C-F bond and Ph ring of the semi-fluorinated side groups at the surface. On the basis of these data, the orientational coupling between the -CF<sub>2</sub>- helix and the arom. ring was found to depend on the length of the fluorocarbon substituent.

IT 474527-61-2 474527-64-5

RL: PRP (Properties)

(property of semi-fluorinated arom. side-group polystyrene-based block copolymers)

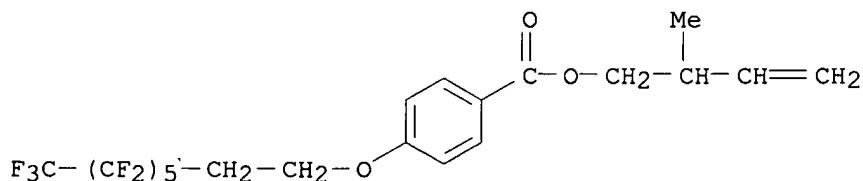
RN 474527-61-2 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-60-1

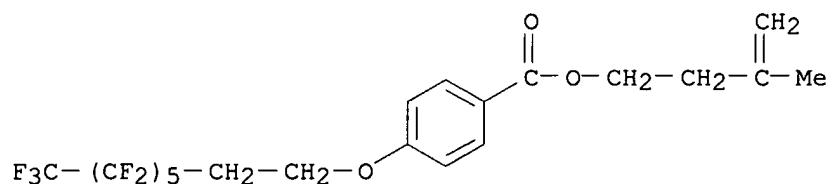
CMF C20 H17 F13 O3



CM 2

CRN 474527-59-8

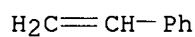
CMF C20 H17 F13 O3



CM 3

CRN 100-42-5

CMF C8 H8



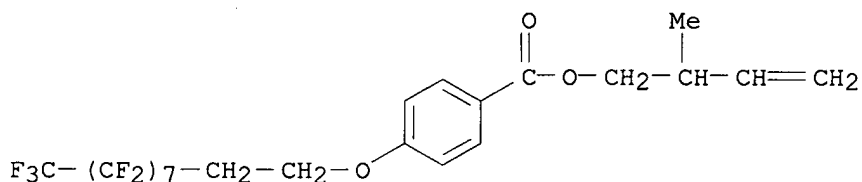
RN 474527-64-5 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-63-4

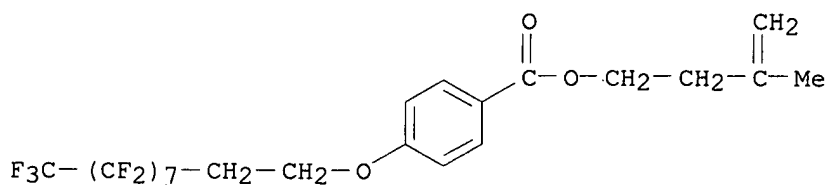
CMF C22 H17 F17 O3



CM 2

CRN 474527-62-3

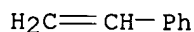
CMF C22 H17 F17 O3



CM 3

CRN 100-42-5

CMF C8 H8





RE.CNT 28      THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5    ANSWER 2 OF 7    CAPLUS    COPYRIGHT 2003 ACS

AN    2001:477548    CAPLUS

DN    135:77654

TI    Silicon-containing polymers having Si-O, Si-N, and Si-C linkages and their manufacture

IN    Manzouji, Takako; Ogawa, Naoshi

PA    Dow Corning Toray Silicone Co., Ltd., Japan

SO    Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT    Patent

LA    Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001181398	A2	20010703	JP 1999-374329	19991228
PRAI	JP 1999-374329		19991228		

AB    The polymers having siloxane, Si-N, and silalkylene linkages with Mn 500-100,000 are manufd. by addn. polymn. of (A) CH<sub>2</sub>:CHSi(R12O)aSiR12N(R2)R3CR2:CH<sub>2</sub> (A = aliph. unsatd. monovalent hydrocarbyl, CH<sub>2</sub>:CR4CO2R5; R4 = H, satd. aliph. hydrocarbyl; R5 = aliph. divalent hydrocarbyl, satd. alkylenoxyalkylene; R1 = satd. hydrocarbyl; R2 = satd. hydrocarbyl, H; a .gtoreq.0) or C<sub>6</sub>H<sub>4</sub>(CO<sub>2</sub>A)<sub>2</sub>, PhA, PhCONA<sub>2</sub>, AR1, and/or AR5A with (B) cyclosiloxanes I, HSiR12O(SiR12O)<sub>n</sub>SiR12H, R13SiO(SiR12O)<sub>n</sub>(SiHR1O)<sub>m</sub>SiR13, R13SiO(SiR12O)<sub>n</sub>R3SiR12OSiR1(OSiR12H)<sub>2</sub>, or R13Si(OSiR12)<sub>n</sub>OSiR12H (R1 = same as the above; R3 = satd. divalent hydrocarbyl; l, m = 1, 2; n .gtoreq.0; l + n .gtoreq.3) in the presence of hydrosilylation catalysts. Thus, reaction of 80 g dimethylsiloxyl-terminated di-Me siloxane and 5.01 g CH<sub>2</sub>:CHSiMe<sub>2</sub>NHCH<sub>2</sub>CH:CH<sub>2</sub> at 105.degree. for 2 h in the presence of 0.02 phr Pt-divinyldisiloxane complex and then with 3.5 g 1-hexene at 95.degree. for 1 h to give a polymer with Mn 2900 and polydispersity 1.6.

IT    347377-29-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manuf. of silicon-contg. polymers having Si-O, Si-N, and Si-C linkages)

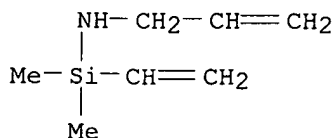
RN    347377-29-1    CAPLUS

CN    1,4-Benzenedicarboxylic acid, di-3-butenyl ester, polymer with .alpha.-(dimethylsilyl)-.omega.-[(dimethylsilyl)oxy]poly[oxy(dimethylsilyl)ene]] and 1-ethenyl-1,1-dimethyl-N-2-propenylsilanamine (9CI) (CA INDEX NAME)

CM    1

CRN    347377-27-9

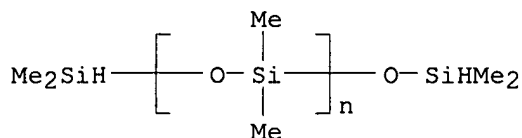
CMF    C7 H15 N Si



CM    2

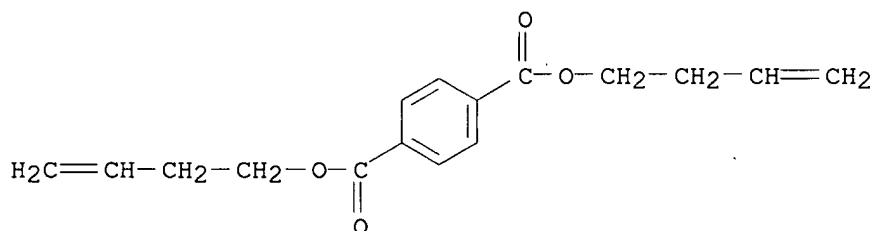
CRN    115254-29-0

CMF (C2 H6 O Si)n C4 H14 O Si2  
CCI PMS



CM 3

CRN 62680-75-5  
CMF C16 H18 O4



L5 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS

AN 2000:208252 CAPLUS

DN 132:335010

TI Preparation and cyclo-depolymerization (CDP) of some olefin-containing polyesters via olefin metathesis

AU Dad, Sameena; Hall, Andrew J.; Hodge, Philip

CS Department of Chemistry, University of Manchester, Manchester, M13 9PL, UK

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2000), 41(1), 466-467

CODEN: ACPPAY; ISSN: 0032-3934

PB American Chemical Society, Division of Polymer Chemistry

DT Journal

LA English

AB A series of olefin-contg. polymers was synthesized by olefin metathesis (ADMET) using Grubbs' catalyst. Starting from these chain-ring equil. were established in dil. (2%w/v) soln. This led to the formation of families of cyclic oligomers in high yields. As expected within each family the proportion of each cyclic oligomer decreases as the ring size increases. In one case a pure monomer ring contg. 32 ring atoms was isolated using preparative gel permeation chromatog.

IT **267898-22-6P 267898-26-ODP**, cyclodepolymd. derivs.

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

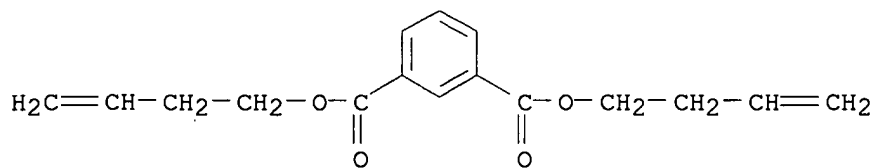
(prepn. and cyclo-depolymn. of some olefin-contg. polyesters via olefin metathesis)

RN 267898-22-6 CAPLUS

CN 1,3-Benzenedicarboxylic acid, di-3-butenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

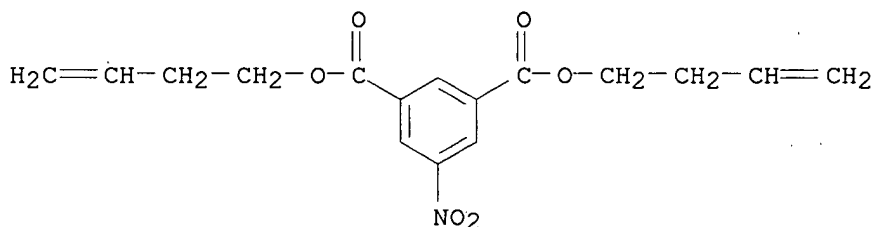
CRN 152766-87-5  
CMF C16 H18 O4



RN 267898-26-0 CAPLUS  
 CN 1,3-Benzenedicarboxylic acid, 5-nitro-, di-3-butenyl ester, homopolymer  
 (9CI) (CA INDEX NAME)

CM 1

CRN 267898-25-9  
 CMF C16 H17 N O6



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS  
 AN 1995:603721 CAPLUS  
 DN 122:326020  
 TI Optical fiber-supporting slot for optical cable, and manufacture thereof  
 IN Matsuno, Shigehiro; Isobe, Masato; Kitayama, Yoshinobu; Tanaka, Takashi  
 PA Ube Nitto Kasei Co, Japan; Sumitomo Electric Industries  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07005328	A2	19950110	JP 1993-47806	19930309
PRAI	JP 1993-47806		19930309		

AB A slotted member for supporting optical fibers and tension members in multistrand tape or fiber cables.

IT **163673-18-5**

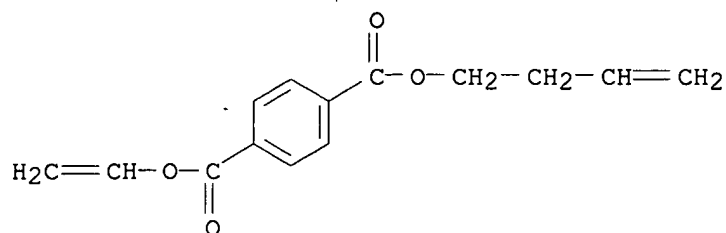
RL: DEV (Device component use); USES (Uses)  
 (slotted support for optical fiber cable)

RN 163673-18-5 CAPLUS

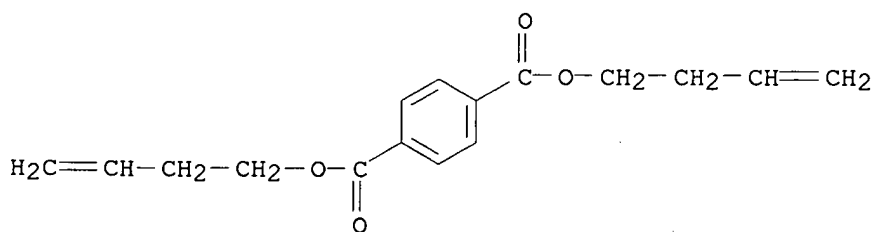
CN 1,4-Benzenedicarboxylic acid, 3-butenyl ethenyl ester, homopolymer (9CI)  
 (CA INDEX NAME)

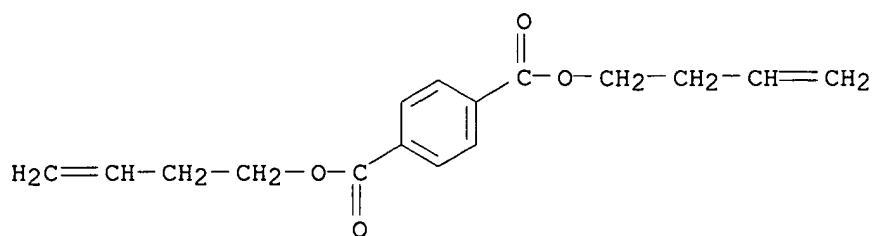
CM 1

CRN 163673-17-4  
 CMF C14 H14 O4

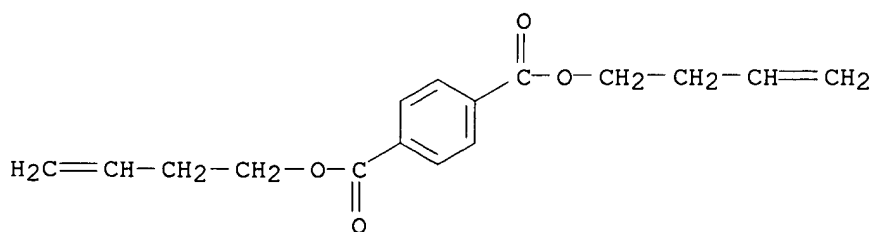


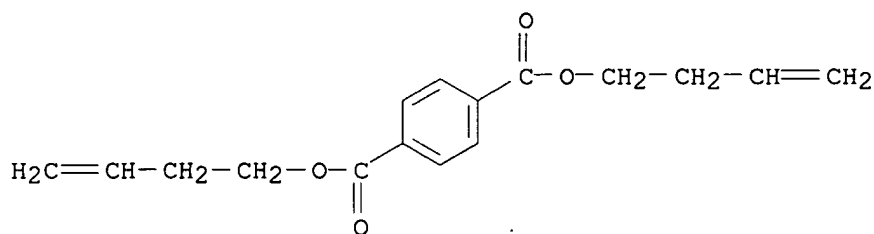
L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS  
 AN 1994:192353 CAPLUS  
 DN 120:192353  
 TI Acyclic diene metathesis (ADMET) polymerization. The synthesis of unsaturated polyesters  
 AU Patton, J. T.; Wagener, K. B.  
 CS Dep. Chem., Univ. Florida, Gainesville, FL, 32611-2046, USA  
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1992), 33(1), 1068-9  
 CODEN: ACPPAY; ISSN: 0032-3934  
 DT Journal  
 LA English  
 AB Several unsatd. ester monomers, e.g., 1,4-benzene dicarboxylic bis(1-hexenyl) ester, 1,4-benzenedicarboxylic bis(1-pentenyl) ester, 1,4-benzenedicarboxylic bis(1-butenyl) ester, 1,4-benzenedicarboxylic bis(1-propenyl) ester, 1-hexene-1-butenolate and 1-hexene-1-propenolate, were prepd. and polymd. via acyclic diene metathesis (ADMET) reaction using Mo-based catalysts, Mo(CHCMe2R)(N-2,6-C6H3-iso-Pr2)[OCCH3(CF3)2]2 (R=Me, Ph). ADMET polymn. offered a viable route for prepn. of pure unsatd. polyesters. The uses of the highly active Mo-based Lewis acid-free alkylidene catalyst provided a clean route to unsatd. polyesters with known vinyl end-groups. The polymerizability of a monomer was limited by the no. of methylene spacers between the ester functionality and the olefin, which was termed as a neg. neighboring group effect. Mo-based catalyst was more tolerant to polar functionalities and reacted at a significantly faster rate than W-based catalysts for some terminal olefins. The difference between Mo- and W-based catalysts in ADMET polymn., as well as the polymn. of other polar functionalities, was discussed.  
 IT **141221-34-3P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and mol. wt. of)  
 RN 141221-34-3 CAPLUS  
 CN 1,4-Benzenedicarboxylic acid, di-3-butenyl ester, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 62680-75-5  
 CMF C16 H18 O4





L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS  
 AN 1992:449304 CAPLUS  
 DN 117:49304  
 TI Acyclic diene metathesis (ADMET) polymerization: the synthesis of unsaturated polyesters  
 AU Patton, J. T.; Boncella, J. M.; Wagener, K. B.  
 CS Cent. Macromol. Sci. Eng., Univ. Florida, Gainesville, FL, 32611-2046, USA  
 SO Macromolecules (1992), 25(15), 3862-7  
 CODEN: MAMOBX; ISSN: 0024-9297  
 DT Journal  
 LA English  
 AB The first ADMET polymn. using the Mocatalysts  $\text{Mo}(\text{:CHCMe}_2\text{R})(\text{:NC}_6\text{H}_3\text{Pr-iso2-2,6})[\text{OCMe}(\text{CF}_3)_2]_2$  ( $\text{R} = \text{Me, Ph}$ ) is presented. These catalysts are much faster in the metathesis of terminal olefins than the W counterparts. Bis(5-hexenyl), bis(4-pentenyl) (I), and bis(3-butenyl) terephthalates and 5-hexenyl 4-pentenoate successfully undergo ADMET homopolymn. These polymns. are initiated under bulk conditions and are continued in soln. to produce poly[oxy-5-decenyloxyterephthaloyl], poly[oxy-4-octenyloxyterephthaloyl], poly[oxy-3-hexenyloxyterephthaloyl], and poly(oxy-3-octenyl ester), resp. No metathesis activity is obsd. for bis(2-propenyl) terephthalate or 5-hexenyl 3-butenate due to a neg. neighboring-group effect. This neg. effect involves either the coordination of the carbonyl O to the metal center, or, simply the polarization of the double bond such that the intermediates of the metathesis process are not favored. The copolymn. of I with 1,9-decadiene produces a random copolymer. All polymer structures are detd. by IR,  $^1\text{H}$  NMR, and  $^{13}\text{C}$  NMR spectroscopy, and no.-av. mol. wts. are detd. by end-group anal. and vapor-pressure osmometry. Synthesis, characterization, and the general limitations of this polymn. are discussed.  
 IT **141221-34-3P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, by metathesis polymn. in presence of molybdenum complex)  
 RN 141221-34-3 CAPLUS  
 CN 1,4-Benzenedicarboxylic acid, di-3-butenyl ester, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 62680-75-5  
 CMF C16 H18 O4

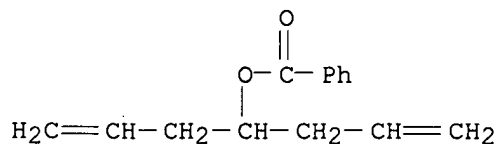




L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS  
 AN 1989:407911 CAPLUS  
 DN 111:7911  
 TI Polymerization by [3 + 2]-cycloaddition. 2. Reactions of hexafluoroacetone azine with substituted diolefins  
 AU Nuyken, Oskar; Maier, Gerhard; Burger, Klaus  
 CS Univ. Bayreuth, Bayreuth, D-8580, Fed. Rep. Ger.  
 SO Makromolekulare Chemie (1989), 190(3), 623-9  
 CODEN: MACEAK; ISSN: 0025-116X  
 DT Journal  
 LA German  
 AB Hexafluoroacetone azide reacts with esters of 1,6-heptadien-4-ol to form oligomers contg. 4,4,8,8-tetrakis(trifluoromethyl)-1,5-diazabicyclo[3.3.0]octan-2,6-diyl groups linked with trimethylene chains with acyloxy side groups. Due to these ester functions the polymers are completely sol. in common solvents. DSC measurements proved these polymers to be partly cryst.  
 IT **121178-25-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation) (oligomeric, prepn. and characterization of)  
 RN 121178-25-4 CAPLUS  
 CN 2-Propanone, 1,1,1,3,3,3-hexafluoro-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]hydrazone, polymer with 1-(2-propenyl)-3-butenyl benzoate (9CI) (CA INDEX NAME)

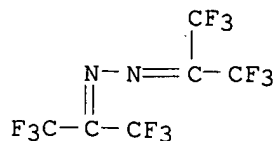
CM 1

CRN 92251-27-9  
 CMF C14 H16 O2



CM 2

CRN 1619-84-7  
 CMF C6 F12 N2



=>

22 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

AN 2002:699500 CAPLUS

DN 137:353580

TI Semifluorinated Aromatic Side-Group Polystyrene-Based Block Copolymers:  
Bulk Structure and Surface Orientation Studies

AU Li, Xuefa; Andruzzi, Luisa; Chiellini, Emo; Galli, Giancarlo; Ober,  
Christopher K.; Hexemer, Alexander; Kramer, Edward J.; Fischer, Daniel A.

CS Department of Materials Science and Engineering, Cornell University,  
Ithaca, NY, 14853, USA

SO Macromolecules (2002), 35(21), 8078-8087

CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB Two families of narrow polydispersity poly(styrene)-based block copolymers bearing side groups contg. both a Ph ring and a para-linked semi-fluorinated side group were designed to produce stable low energy surfaces. The effects of the Ph ring on the surface and bulk structure of the materials were investigated. The semi-fluorinated side chains were found to self-assemble into liq.-cryst. smectic layers within the microphase domains. An unexpected enhancement of surface organization by the arom. group was obsd. The bulk morphol. and the interplay between microphase sepn. and liq. cryst. self-assembly were examd. using transmission electron microscopy and X-ray scattering. Near-edge X-ray absorption fine structure (NEXAFS) studies were used to probe the surface coverage of the fluorinated segments. NEXAFS also allowed the detn. of the orientation parameters (SC-F and S.pi.\*) of the C-F bond and Ph ring of the semi-fluorinated side groups at the surface. On the basis of these data, the orientational coupling between the -CF<sub>2</sub>- helix and the arom. ring was found to depend on the length of the fluorocarbon substituent.

IT 474527-61-2 474527-64-5

RL: PRP (Properties)

(property of semi-fluorinated arom. side-group polystyrene-based block copolymers)

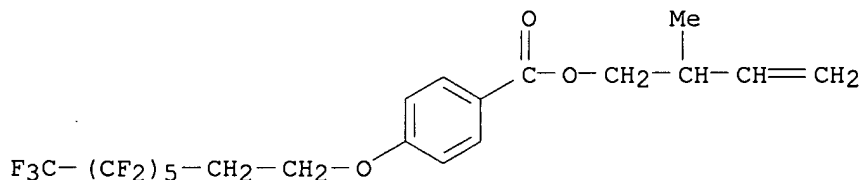
RN 474527-61-2 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-60-1

CMF C20 H17 F13 O3

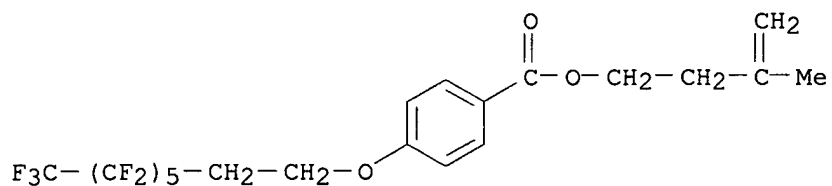


CM 2

CRN 474527-59-8

CMF C20 H17 F13 O3

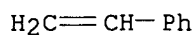




CM 3

CRN 100-42-5

CMF C8 H8



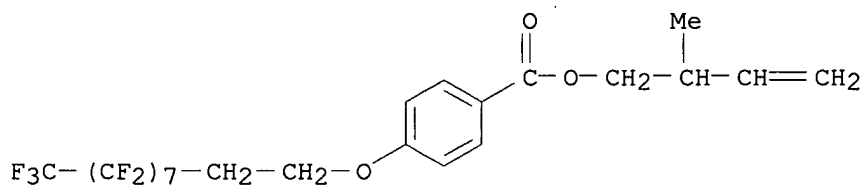
RN 474527-64-5 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-63-4

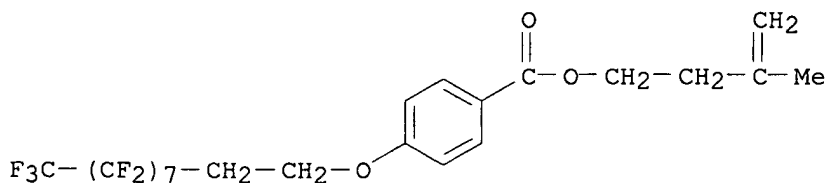
CMF C22 H17 F17 O3



CM 2

CRN 474527-62-3

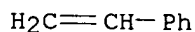
CMF C22 H17 F17 O3



CM 3

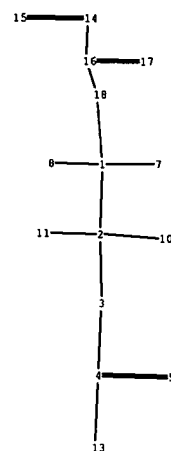
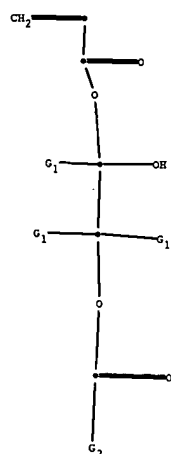
CRN 100-42-5

CMF C8 H8



RE.CNT 28      THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 15 16 17 18

chain bonds :

1-2 1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 14-15 14-16 16-17  
16-18

exact/norm bonds :

1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 16-17 16-18

exact bonds :

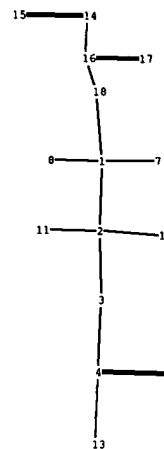
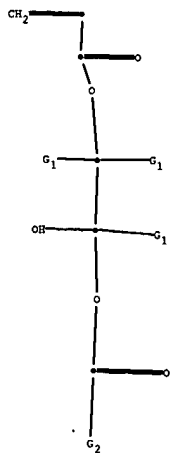
1-2 14-15 14-16

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 15 16 17 18

chain bonds :

1-2 1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 14-15 14-16 16-17  
16-18

exact/norm bonds :

1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 16-17 16-18

exact bonds :

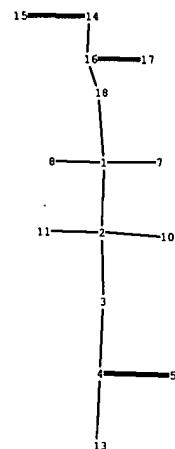
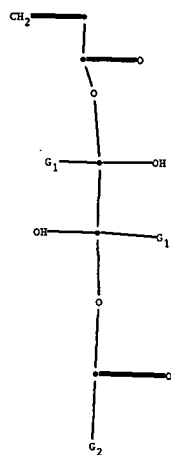
1-2 14-15 14-16

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 15 16 17 18

chain bonds :

1-2 1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 14-15 14-16 16-17  
16-18

exact/norm bonds :

1-7 1-8 1-18 2-3 2-10 2-11 3-4 4-5 4-13 16-17 16-18

exact bonds :

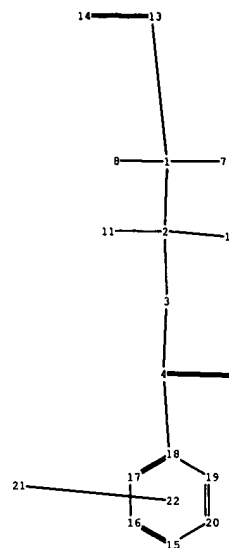
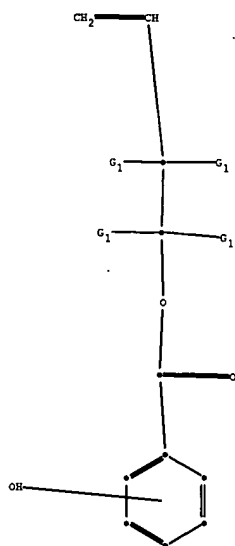
1-2 14-15 14-16

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS



chain nodes :

1 2 3 4 5 7 8 10 11 13 14 21

ring nodes :

15 16 17 18 19 20

chain bonds :

1-2 1-7 1-8 1-13 2-3 2-10 2-11 3-4 4-5 4-18 13-14

ring bonds :

15-16 15-20 16-17 17-18 18-19 19-20

exact/norm bonds :

1-7 1-8 2-3 2-10 2-11 3-4 4-5

exact bonds :

1-2 1-13 4-18 13-14

normalized bonds :

15-16 15-20 16-17 17-18 18-19 19-20

G1:H,OH,Ak

G2:Cb,Cy,Hy

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS  
11:CLASS 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom 21:CLASS 22:CLASS



SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56073006	A2	19810617	JP 1979-149134	19791116
PRAI	JP 1979-149134		19791116		

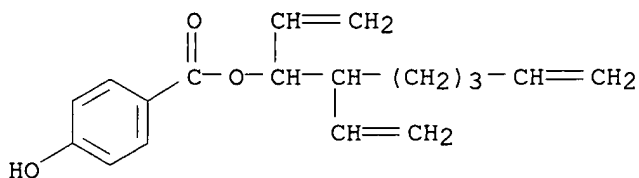
AB Benzoic acid esters I (R = satd. or unsatd. aliph. hydrocarbon; Q = halo, alkyl, or OH; n = 0-2) are microbicides. Thus, 100 ppm geranyl 2-chlorobenzoate controlled *Piricularia oryzae* and *Cochliobolus miyabeanus* on rice.

IT **69690-11-5**

RL: BIOL (Biological study)  
(as microbicide)

RN 69690-11-5 CAPLUS

CN Benzoic acid, 4-hydroxy-, 1,2-diethenyl-6-heptenyl ester (9CI) (CA INDEX NAME)





LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01097683	A2	19890417	JP 1987-254934	19871008
	JP 2613770	B2	19970528		
PRAI	JP 1987-254934		19871008		

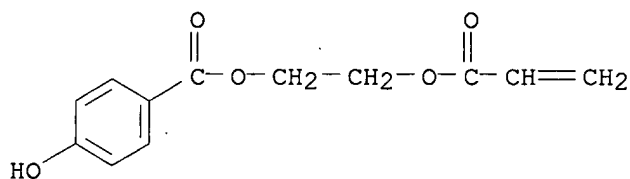
AB Thermal recording materials, utilizing a coloration reaction of a leuco dye with a color developer, contain .gtoreq.1 benzoic ester I (R = H, Me; Z = lower alkylene; n = 1-3) as the color developer. The materials exhibit good sensitivity and storage stability. Thus, a paper support was coated with a compn. contg. 3-(N-methyl-N-cyclohexylamino-6-methyl-7-anilino)fluoran, p-hydroxybenzoic acid (2-acryloyloxy)ethyl ester, CaCO<sub>3</sub>, Zn stearate, and poly(vinyl alc.) to give a thermal recording paper, which showed high sensitivity and gave high d. images with good thermal resistance and moisture resistance.

IT **123426-65-3**, (2-Acryloyloxy)ethyl p-hydroxybenzoate  
**123426-66-4**, (2-Acryloyloxy)ethyl 2,4-dihydroxybenzoate  
**123426-67-5**, (2-Methacryloyloxy)ethyl 3,4-dihydroxybenzoate  
 RL: USES (Uses)

(color developer, for thermal printing material)

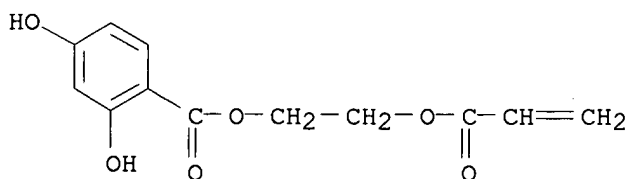
RN 123426-65-3 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



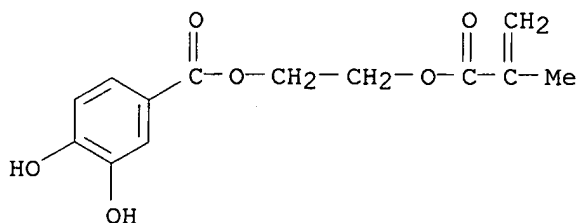
RN 123426-66-4 CAPLUS

CN Benzoic acid, 2,4-dihydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 123426-67-5 CAPLUS

CN Benzoic acid, 3,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 56 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1989:145089 CAPLUS

DN 110:145089

TI Thermal recording material based on dye precursor/electron acceptor reaction

IN Satomura, Masato; Igarashi, Akira

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63193882	A2	19880811	JP 1987-25790	19870206
PRAI	JP 1987-25790		19870206		

AB The claimed recording material is based on thermal color development reaction between an electron-donating uncolored dye precursor and an electron-accepting compd., wherein the dye precursor and/or the electron acceptor have a property of being hardened photochem., by the imagewise exposure, thereby allowing to stabilize the background by a subsequent uniform flash exposure. Therefore, it produces an image with an improved image discrimination, high developed and good resistivity against chem. attack. The photochem. hardening are attained, for example, by a photopolymerizable color former, photopolymerizable developer, addn. of a photopolymerizable compd. to core material comprising the color forming or use of a photopolymerizable compds. for the wall materials of microcapsules contg. the color-forming composite. Thus, (1) a dispersion of dye precursors consisting of 2-acrylamino-6-diethylaminofluoran and 2-acrylamino-6-dibutylaminofluoran dispersed in poly(vinyl alc.) aq. soln., (2) a dispersion of electron acceptors consisting of 2,2-bis(4-hydroxyphenyl)propane and 2,2-bis(.beta.-methacryloxyethyl 4-hydroxyphenyl-lactate) dispersed in poly(vinyl alc.) and other additives such as kaolin, silica, paraffin wax, etc. were mixed, then the mixt. was coated on a paper sheet. It gave an excellent image by thermal head application in a facsimile unit. The developed image was fixed by a uniform post-exposure to the light from a high pressure mercury lamp.

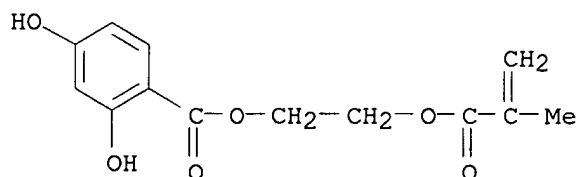
IT 118585-28-7

RL: USES (Uses)

(color developer, photo-fixable thermal printing material contg.)

RN 118585-28-7 CAPLUS

CN Benzoic acid, 2,4-dihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 57 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1989:85714 CAPLUS

DN 110:85714

TI Recording material based on the color-forming reaction between an electron-donating dye precursor and an ester of hydroxybenzoic acid

IN Satomura, Masato; Iwakura, Ken; Igarashi, Akira

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

L46 ANSWER 66 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1983:36200 CAPLUS

DN 98:36200

TI Weather-resistant coating compositions

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57121066	A2	19820728	JP 1981-7188	19810122
PRAI	JP 1981-7188		19810122		

AB Weather-resistant coating compns. contain copolymers of unsatd. salicylic acid deriv. monomer 0.05-50, styrene, acrylonitrile, and/or alkyl methacrylate 20-99.95, and optionally other comonomer <79.95%. For example, styrene 500, Et acrylate 485, 2-hydroxyethyl methacrylate 150, methacrylic acid 15, and mono(2-salicyloyloxyethyl) maleate (I) 20 parts were polymd. in xylene in the presence of AIBN and di-tert-Bu peroxide at 120.degree.. A 70:20:10 (solids) blend of the copolymer, Super Beckamine L 117-60, and Epiclone 1050 was pigmented with 50% TiO2 and baked at 160.degree. for 20 min to give a 36 .mu. coating with Erichsen value 5.6 mm (4.5 mm after 6-mo outdoor weathering test) and impact strength (1/2 in., 500 g) 40-50 (30-40) cm, compared with 5.2 (<1) and 40-50 (<10), resp., for a I-free control.

IT **84032-87-1**

RL: TEM (Technical or engineered material use); USES (Uses)  
(coatings, weather-resistant)

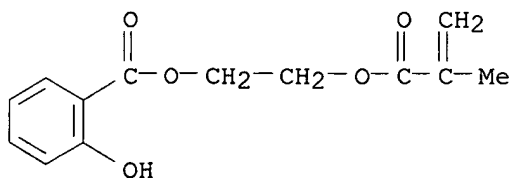
RN 84032-87-1 CAPLUS

CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenylbenzene, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 53607-08-2

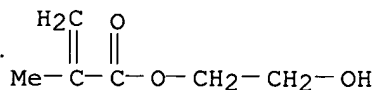
CMF C13 H14 O5



CM 2

CRN 868-77-9

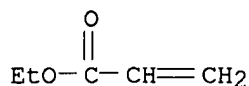
CMF C6 H10 O3



CM 3

CRN 140-88-5

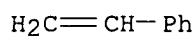
CMF C5 H8 O2



CM 4

CRN 100-42-5

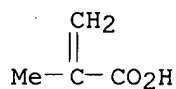
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2

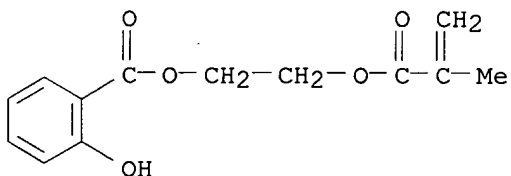


IT **53607-08-2P**

RL: IMF (Industrial manufacture); PREP (Preparation)  
(manuf. and polymn. of)

RN 53607-08-2 CAPLUS

CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester  
(9CI) (CA INDEX NAME)



L46 ANSWER 67 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1982:86115 CAPLUS

DN 96:86115

TI Unsaturated salicylate esters

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

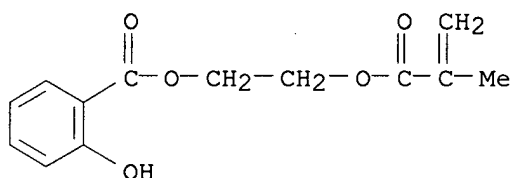
KIND

DATE

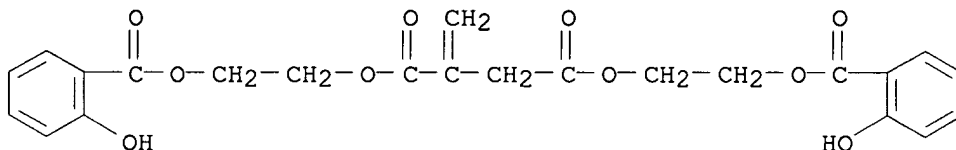
APPLICATION NO.

DATE

PI JP 56139439 A2 19811030 JP 1980-42832 19800403  
 JP 63037777 B4 19880727  
 PRAI JP 1980-42832 19800403  
 AB Unsatd. salicylates cis-o-HOC6H4CO2CH2CHRO2CCH:CHCO2H [R = H (I) [80651-80-5], Me [80651-81-6]], trans-o-HOC6H4CO2CH2CH2O2CCH:CHCO2CH2CH2O2CC6H4OH-o [80651-82-7], o-HOC6H4CO2CH2CH2O2CCMe:CH2 [53607-08-2], o-HOC6H4CO2CH2CH2O2CC(:CH2)CH2CO2CH2CH2O2CC6H4OH-o [80651-83-8], and trans,trans-o-HOC6H4CO2CH2CH2O2CCH:CHCO2CH2CH2O2CCH:CHCO2CH2CH2O2CC6H4OH-o [80651-84-9], which form UV-absorbing polymers, were prepd. For example, maleic anhydride [108-31-6] was heated with 2-hydroxyethyl salicylate [87-28-5] at 120.degree. for 4 h to give I.  
 IT **53607-08-2P 80651-83-8P**  
 RL: PREP (Preparation)  
 (prepn. of)  
 RN 53607-08-2 CAPLUS  
 CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 80651-83-8 CAPLUS  
 CN Butanedioic acid, methylene-, bis[2-[(2-hydroxybenzoyl)oxy]ethyl] ester (9CI) (CA INDEX NAME)



L46 ANSWER 68 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 1976:52107 CAPLUS  
 DN 84:52107  
 TI Binder for electrophotographic materials  
 IN Kochi, Tsuneo; Tanaka, Toshiyuki; Muraoka, Rikio  
 PA Mitsubishi Rayon Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50051328	A2	19750508	JP 1973-99316	19730905
PRAI	JP 1973-99316		19730905		

AB A binder for electrophotog. consists of a mixt. of copolymers (A) and (B), (A) (av. mol. wt. 500-5000) being obtained by copolymerizing a vinyl monomer (C), produced by adding the hydroxyalkyl ester of an .alpha.,.beta.-monoethylenically unsatd. carboxylic acid to a carboxylic acid anhydride, with a 2nd vinyl monomer (D), such as CH2:CRCO2R1 [R = H, Me; R1 = C1-13 alkyl, cycloalkyl, PhCH2, phenethyl], and having the repeating structural unit [CH2CRCO2R1] [R = H, Me; R1 1 = C1-13 alkyl,

cycloalkyl, PhCH<sub>2</sub>, phenethyl or ZO<sub>2</sub>CZ<sub>1</sub>CO<sub>2</sub>H where Z = C<sub>2</sub>-8 alkylene, a polyethylene glycol residue, a poly(propylene glycol) residue, and Z<sub>1</sub> = divalent org. moieties] .gtoreq.30% and the structural unit O<sub>2</sub>CZ<sub>1</sub>CO<sub>2</sub>H 0.5-60.degree.; and B (av. mol. wt. 5000-50,000) being a copolymer having the structural unit from above, CH<sub>2</sub>CRCO<sub>2</sub>R<sub>1</sub>, .gtoreq.30% and the structural unit, O<sub>2</sub>CZ<sub>1</sub>CO<sub>2</sub>H (Z<sub>1</sub> same as above), .ltoreq.60%, and the content of the structural unit O<sub>2</sub>CZ<sub>1</sub>CO<sub>2</sub>H in the mixt. being 0.5-60%. During the prepn. of A, 10-30% of the total amt. of C, 70-90% of the total amt. of D, and other vinyl monomers, when deemed necessary, are mixed and polymd., and the rest of the C and D are added after the polymn. has passed beyond the halfway point. This binder gives electrophotog. materials with good charging properties, moisture resistance, high d. images, and superior gradients. Thus, a PhMe soln. contg. the vinyl monomer (I) was obtained from 2-hydroxyethyl methacrylate 46.8, phthalic anhydride 55.2, Et<sub>3</sub>N 0.5, hydroquinone monomethyl ether 0.01 and PhMe 100 parts. This PhMe soln. 2, Me methacrylate 12, Bu methacrylate 72, PhMe 101.5, iso-PrOH 7.5, and azobisisobutyronitrile 1.0 part were mixed (16.67% of the total amt. of the vinyl monomer to be used and polymd. at 80.degree.. When the d.p. reached 90%, Me methacrylate 7, Bu methacrylate 3, the above PhMe soln. of vinyl monomer 10, PhMe 15, n-dodecylmercaptan 1.5, and azobisisobutyronitrile 0.5 part, were added and the polymn. was completed at 80.degree.. PhMe 20 parts was then added to give a PhMe soln. The polymer soln. 25, Rose Bengal 0.01, Bromphenol blue 0.015, auramine 0.050, MeOH 2.0, PhMe 64 and ZnO 60 parts were ball-milled. The dispersion was stable and no settling of ZnO or sepn. of the sensitizer dyes was obsd. on standing for 2 days at room temp. An electrophotog. plate obtained with this coating compn. showed an initial charge of -580 V, charge retention after 10 sec in the dark 90%, and the time for the charge to decrease to -20 V on exposure to 30 lx light was 5.0 sec.

IT **57375-36-7**

RL: USES (Uses)

(binder, for electrophotog. materials)

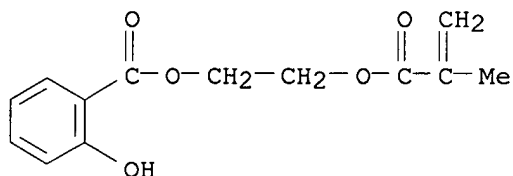
RN 57375-36-7 CAPLUS

CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 53607-08-2

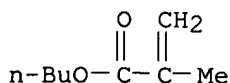
CMF C13 H14 O5



CM 2

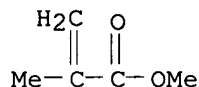
CRN 97-88-1

CMF C8 H14 O2



CM 3

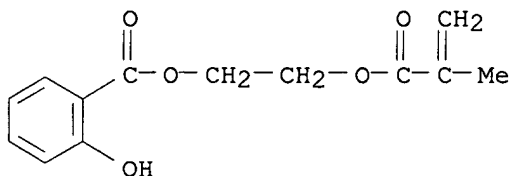
CRN 80-62-6  
CMF C5 H8 O2



L46 ANSWER 69 OF 71 CAPLUS COPYRIGHT 2003 ACS  
AN 1975:45363 CAPLUS  
DN 82:45363  
TI High-molecular-weight stabilizers for cellulose triacetate  
AU Askarov, M. A.; Khalmirzaeva, R.; Berenshtein, E. I.; Aikhodzhaev, B. I.; Bank, A. S.  
CS Inst. Khim., Tashkent, USSR  
SO Vysokomolekulyarnye Soedineniya, Seriya A (1974), 16(7), 1642-7  
CODEN: VYSAAF; ISSN: 0507-5475  
DT Journal  
LA Russian  
AB Me acrylate-2-methacryloyloxyethyl anthranilate copolymer (I) [53620-04-5], Me acrylate-2-methacryloyloxethyl salicylate copolymer (II) [53620-05-6] and Me acrylate-2-methacryloyloxyethyl p-aminosalicylate copolymer (III) [53620-06-7] are excellent light stabilizers for cellulose triacetate (IV) [9012-09-3] and are not removed from IV by extn. with water or org. solvents. I is a better stabilizer than II or III. The double ester monomers are synthesized by treating  $\text{CH}_2:\text{CMeCO}_2\text{CH}_2\text{CH}_2\text{Cl}$  with the corresponding acid.  
IT **53620-05-6 53620-06-7**  
RL: USES (Uses)  
(light stabilizers, for cellulose triacetate)  
RN 53620-05-6 CAPLUS  
CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-propenoate (9CI) (CA INDEX NAME)

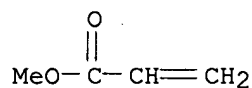
CM 1

CRN 53607-08-2  
CMF C13 H14 O5



CM 2

CRN 96-33-3  
CMF C4 H6 O2



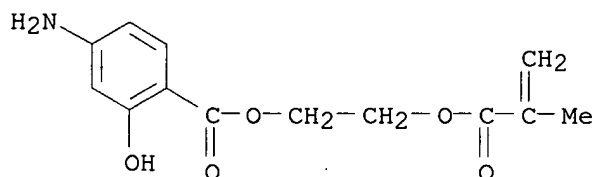
RN 53620-06-7 CAPLUS

CN Benzoic acid, 4-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 53607-09-3

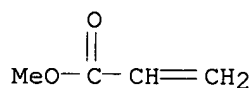
CMF C13 H15 N O5



CM 2

CRN 96-33-3

CMF C4 H6 O2

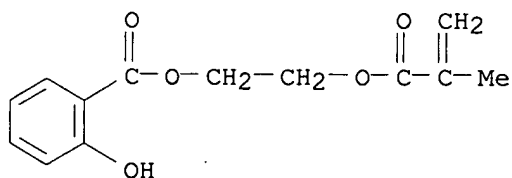


IT **53607-08-2P 53607-09-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

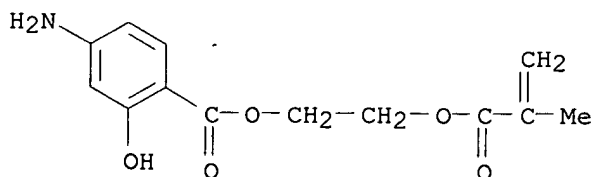
RN 53607-08-2 CAPLUS

CN Benzoic acid, 2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 53607-09-3 CAPLUS

CN Benzoic acid, 4-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)





L46 ANSWER 20 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 2000:697257 CAPLUS  
 DN 133:274224  
 TI Photosensitive and heat-sensitive recording material  
 IN Yanagihara, Naoto; Hara, Toshio  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 42 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000272244	A2	20001003	JP 1999-79831	19990324
PRAI	JP 1999-79831		19990324		

AB The title recording material possesses, on a support, a recording layer contg. (i) (a) a dye which is formed by the action of either an electron-donating colorless dye and an electron-accepting compd. or an electron-accepting colorless dye and an electron-donating compd., (b) a decoloring agent which contacts with the dye to decolor it, and (c) a photopolymerizable compd. having a polymerizable vinyl monomer portion, (ii) (a) and (d) a decoloring agent which has a polymerizable vinyl monomer portion to be photopolymerizable and contacts with the dye to decolor it, (iii) (e) a dye which has a polymerizable vinyl monomer portion to be photopolymerizable and is formed by the action of the above combination of the dye and compd. and (b) or (iv) (f) a dye which can be decolorized by external stimulation and (c). The colored dye in the material is decolorized by exposure and heat treatment to form high quality images.

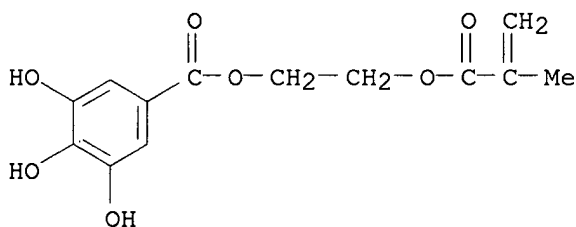
IT **34573-67-6 141889-13-6**

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(color developer; photoimaging compn. contg. dye, decoloring agent, and photopolymerizable compd. having vinyl group)

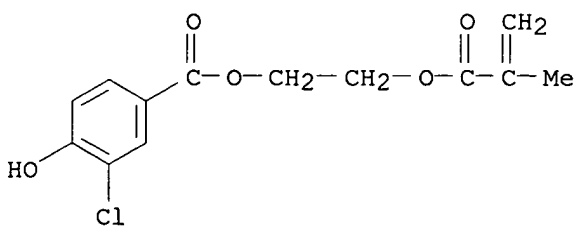
RN 34573-67-6 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

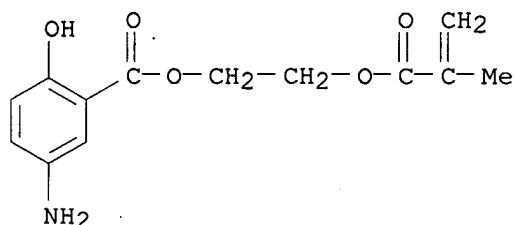


L46 ANSWER 22 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 1999:206408 CAPLUS  
 DN 131:63362  
 TI Release of 5-aminosalicylic acid from acrylic type polymeric prodrugs designed for colon-specific drug delivery  
 AU Davaran, Soodabeh; Hanaee, Jalal; Khosravi, Abbas  
 CS Faculty of Pharmacy, Department of Pharmaceutical Chemistry, University of Tabriz, Tabriz, Iran  
 SO Journal of Controlled Release (1999), 58(3), 279-287  
 CODEN: JCREEC; ISSN: 0168-3659  
 PB Elsevier Science Ireland Ltd.  
 DT Journal  
 LA English  
 AB New acrylic type polymeric systems having degradable ester or amide bonds linked to the bioactive agent 5-amino salicylic acid (5-ASA), were prepd. and evaluated as materials for colon-specific drug delivery. Methacryloyloxyethyl 5-aminosalicylate (MOES), and N-methacryloylaminoethyl-5-aminosalicylamide (MAES) were prepd. as the polymerizable derivs. of 5-ASA using activated ester methodol. The drug-contg. monomers were free radically copolymd. with methacrylic acid or hydroxyethyl methacrylate, utilizing azobisisobutyronitrile as initiator. The polymer bearing 5-ASA units as side substituents of the acrylic backbone were obtained in the form of poly pendent esters or poly pendent amides. The drug release studies were performed by hydrolysis in buffered solns. (pH 1, 7.2, 8.5), or simulated intestinal fluid contg. pancreatin to measure the chem. degrdn. expected to occur in the intestinal tract. The release profiles indicated that the hydrolytic behavior of polymers strongly depends on their degree of swelling, type of comonomer, and the nature of hydrolyzable bond. Implication of the results for use of these polymers for colon targeting are discussed.  
 IT **228412-54-2P 228412-55-3P**  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (release of aminosalicylic acid from polyacrylic prodrugs for colon-specific drug delivery)  
 RN 228412-54-2 CAPLUS  
 CN Benzoic acid, 5-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 228412-51-9

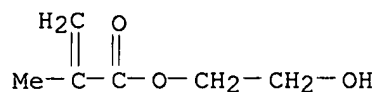
CMF C13 H15 N O5



CM 2

CRN 868-77-9

CMF C6 H10 O3



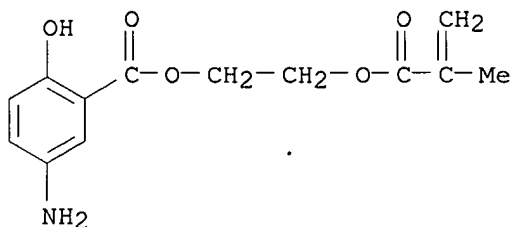
RN 228412-55-3 CAPLUS

CN Benzoic acid, 5-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 228412-51-9

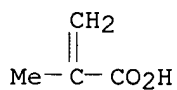
CMF C13 H15 N O5



CM 2

CRN 79-41-4

CMF C4 H6 O2



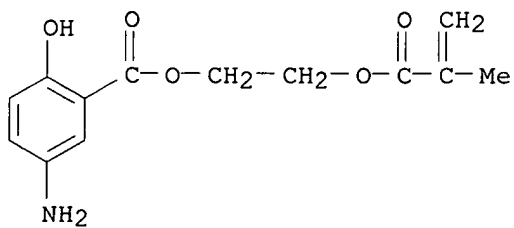
IT **228412-51-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

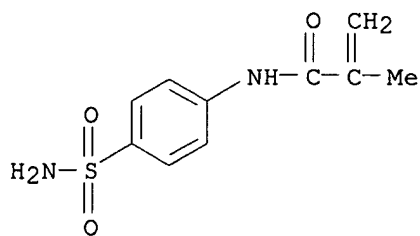
(release of aminosalicylic acid from polyacrylic prodrugs for colon-specific drug delivery)

RN 228412-51-9 CAPLUS

CN Benzoic acid, 5-amino-2-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



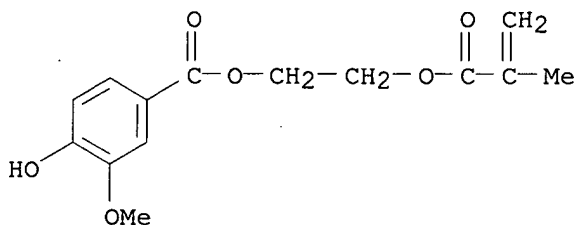
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT



CM 2

CRN 35280-69-4

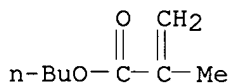
CMF C14 H16 O6



CM 3

CRN 97-88-1

CMF C8 H14 O2



L46 ANSWER 25 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1997:92039 CAPLUS

DN 126:162201

TI Synthesis of the new "surface-active comonomers" for potential applications in dentistry

AU Gibas, Mirosław

CS Department of Polymer Chemistry, Silesian Technical University, Gliwice, Pol.

SO Polish Journal of Applied Chemistry (1996), 40(1-2), 115-118

CODEN: PJACE2; ISSN: 0867-8928

PB Wydawnictwo Naukowe PWN

DT Journal

LA English

AB New monomers, i.e. the adducts of aminobenzoic acids with glycidyl methacrylate were synthesized and characterized by <sup>1</sup>HNMR and mass spectroscopy. The compds. could be used as a "primer" part of the dental adhesive system.

IT 186972-77-0P

RL: BYP (Byproduct); PREP (Preparation)

(prepn. of surface-active comonomers for applications in dentistry)

RN 186972-77-0 CAPLUS

CN Benzoic acid, 4-amino-2-hydroxy-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-

L46 ANSWER 31 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1994:469666 CAPLUS

DN 121:69666

TI Color developer inks and pressure sensitive recording sheets

IN Sano, Masajiro; Iwakura, Ken

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06040149	A2	19940215	JP 1992-217433	19920724
PRAI	JP 1992-217433		19920724		

OS MARPAT 121:69666

AB The inks contain color developers, photocurable compds. contg. 3-halo-4-hydroxybenzoates I (X = halo; Y = ethylenic group-contg. monovalent group; Z = H, alkyl, alkoxy), photoinitiators, and pigments. The sheets are printed by using the inks.

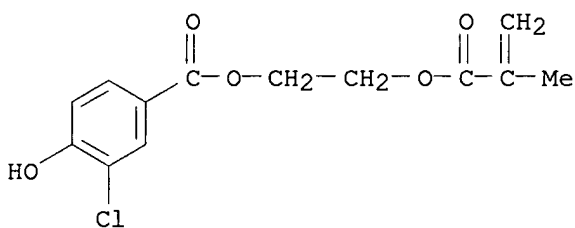
IT **141889-13-6 142177-47-7 143158-01-4**

RL: USES (Uses)

(photocurable color developer inks contg., for pressure sensitive recording sheets)

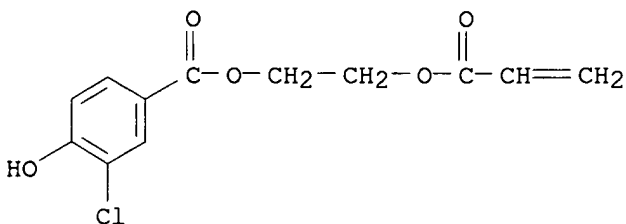
RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



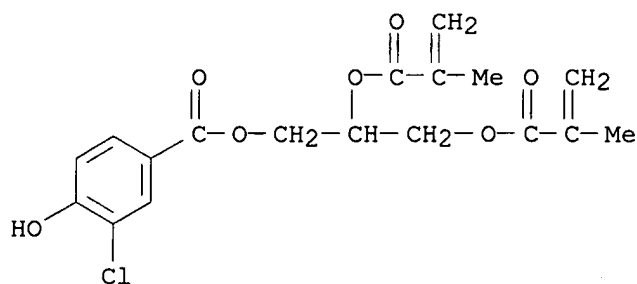
RN 142177-47-7 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



RN 143158-01-4 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2,3-bis[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 32 OF 71 CAPLUS COPYRIGHT 2003 ACS  
 AN 1994:311539 CAPLUS  
 DN 120:311539  
 TI Photoimaging material and image formation using some  
 IN Wakata, Juichi; Iwasaki, Masayuki; Fujikura, Sadao; Ito, Hideaki  
 PA Fuji Photo Film Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05080510	A2	19930402	JP 1991-239484	19910919
PRAI	JP 1991-239484		19910919		

AB In the title material comprising a 1st photosensitive-resin layer developable by an aq. alkali soln. and a 2nd photosensitive-resin layer developable by a weaker aq. alkali soln. than the above, the 1st layer contains a polymer of acid value 70-150 with acid groups of pKa 9-13, and the 2nd layer contains a polymer of acid value 50-250 with acid groups of pKa 3-8. The 1st layer may contain a polymer with SO<sub>2</sub>NH, CONHCO, or hydroxyphenyl and the 2nd layer CO<sub>2</sub>H. The image is produced on the above layers by patternwise exposing the 2nd layer, developing the exposed 2nd layer using a weaker alkali developer which will not develop the 1st layer, patternwise exposing the exposed 1st layer, and developing the 1st layer using an alkali developer having a smaller H<sup>+</sup> concn. than the above weaker developer.

IT **155079-20-2**

RL: USES (Uses)

(photoresist compn. from)

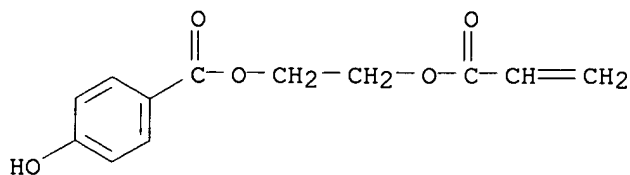
RN 155079-20-2 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 123426-65-3

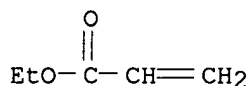
CMF C12 H12 O5



CM 2

CRN 140-88-5

CMF C5 H8 O2



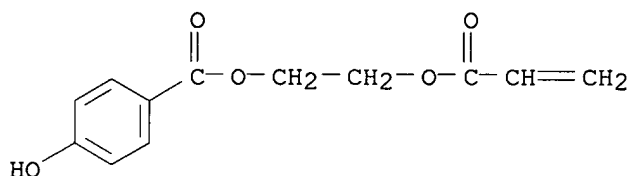
IT 123426-65-3

RL: USES (Uses)

(prepn. polymn. of, photoresist compn. from)

RN 123426-65-3 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1994:232174 CAPLUS

DN 120:232174

TI Photosensitive thermal recording materials providing high density image

IN Fukushima, Juichi; Iwakura, Ken; Matsumoto, Hirotaka

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05281716	A2	19931029	JP 1992-77263	19920331
	JP 2786970	B2	19980813		
PRAI	JP 1992-77263		19920331		

AB The title materials consists of a support coated with a layer comprising microencapsulated electron-donating colorless dye, an electron-accepting compd. having polymg. ethylene group, a photoinitiator, and a polymer having a repeating unit I (R = H, halo, alkyl, alkoxy, aryl; R1 = H, alkyl, OH, alkoxy; R2 = H, alkyl; Z = O, NH; Z1 = divalent group; Z2 = CO2, SO2, NHCO, O, CO). The materials provide high-d. images. Crystn. of the compds. in the materials is prevented.

IT 35442-74-1P, 2-Methacryloyloxyethyl 4-hydroxybenzoate homopolymer

RL: PREP (Preparation)

(prepn. of, photothermal recording material contg.)

RN 35442-74-1 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 34573-66-5

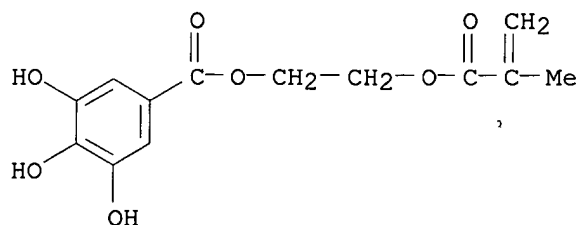
CMF C13 H14 O5

CN Benzoic acid, 3,4,5-trihydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-(1,1-dimethylethyl)-2-propenamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 34573-67-6

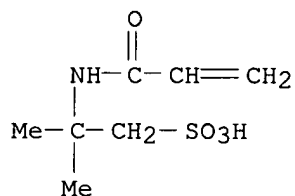
CMF C13 H14 O7



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

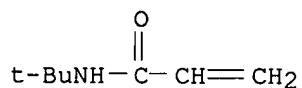


● Na

CM 3

CRN 107-58-4

CMF C7 H13 N O



L46 ANSWER 36 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:497018 CAPLUS

DN 119:97018

TI Process for producing ultraviolet-absorbent self-dispersible water-based vinyl resin and fine resin particles

IN Minami, Takahide; Noumi, Yoko; Nakamura, Koichi

PA Kao Corp., Japan

SO PCT Int. Appl., 35 pp.



DT Patent  
LA Japanese  
FAN.CNT 1

FAN.CNT 1

APPLICATION NO.      DATE

W: JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE

JP 3202233      B2      20010827      JP 1992-510540      19920522

PRAI JP 1991-117418 A 19910522

WO 1992-JP663                      W                      19920522

AB The title process, useful for prepn. of cosmetics, is described by soln. polymn. of monomers bearing groups with 20-95% mol. coeff. absorption .gtoreq.10,000 UV absorption [selected from (meth)acrylamides, (meth)acrylate, and/or substituted vinylbenzenes] and 5-80% salt formable group-contg. monomers, neutralizing, and adding water. Thus, an emulsion with particles with av. diam. .ltoreq.0.03 .mu.m was prepd. by polyimg. a mixt. of CH<sub>2</sub>CHCONH(CH<sub>2</sub>)<sub>2</sub>CO-p-C<sub>6</sub>H<sub>4</sub>NEt<sub>2</sub> 80, Bu acrylate 10, and acrylic acid 9 parts in Me Et ketone (I) soln. with V 59, pptg. with 1:1 Me<sub>2</sub>CO-EtOH mixt., neutralizing with 1N NaOH in I, and adding H<sub>2</sub>O.

IT 149273-68-7

RL: USES (Uses)

(polymer blends, aq. emulsions, UV-absorbent and self-dispersible)

RN 149273-68-7 CAPLUS

CN Benzoic acid, 4-benzoyl-3-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 149273-60-9

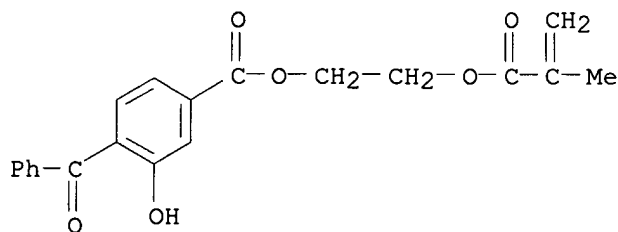
$$\text{CMF} \quad (\text{C}_{20} \text{H}_{18} \text{O}_6 \cdot \text{C}_{16} \text{H}_{18} \text{O}_5 \cdot \text{C}_4 \text{H}_6 \text{O}_2)_x$$

CCI      PMS

CM 2

CRN 149273-59-6

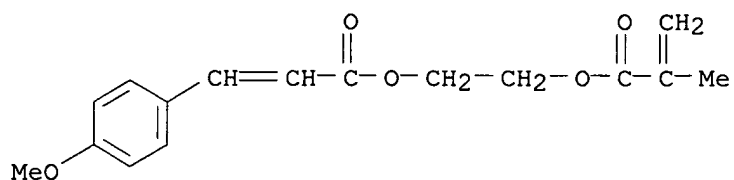
CMF C20 H18 O6



CM 3

CRN 107162-92-5

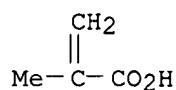
CMF C16 H18 O5



CM 4

CRN 79-41-4

CMF C4 H6 O2



IT **149273-60-9**

RL: USES (Uses)

(polymer salt blends, aq. emulsions, UV-absorbent and self-dispersible)

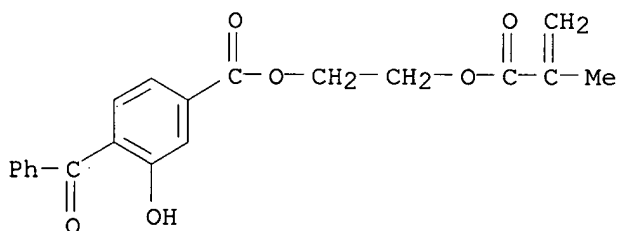
RN 149273-60-9 CAPLUS

CN Benzoic acid, 4-benzoyl-3-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 149273-59-6

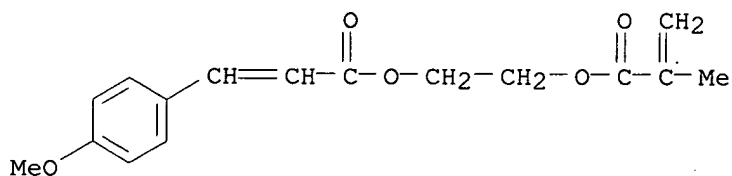
CMF C20 H18 O6



CM 2

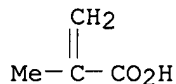
CRN 107162-92-5

CMF C16 H18 O5



CM 3

CRN 79-41-4  
CMF C4 H6 O2



L46 ANSWER 37 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:91007 CAPLUS

DN 118:91007

TI Recording materials providing high color quality magenta image

IN Iwakura, Ken; Satomura, Masato; Wachi, Naotaka

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04195048	A2	19920715	JP 1990-326217	19901128
PRAI	JP 1990-326217		19901128		

AB The title materials contain, on a support, microcapsules contg. an electron-donating colorless dye(s) which provides hue with  $a^*$  from -60 to 75 and  $b^*$  from -3 to +5 in the CIE-LAB std. colorimetric system under a fluorescent lamp at color temp. 5500 K together with an electron-accepting compd. The materials show good coloring properties and provide high color quality magenta images. Thus, a pressure-sensitive copying set from a color-former sheet using microcapsules contg. I and II and a color-developer sheet using Zn 3,5-bis-.alpha.-methylbenzylsalicylate gave a magenta image ( $a^* = -62$ ;  $b^* = -1$ ).

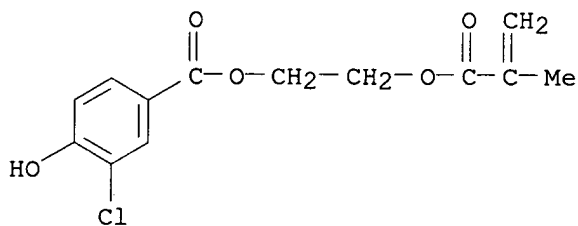
IT **141889-13-6**

RL: USES (Uses)

(color-developer, recording material using)

RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 38 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:90939 CAPLUS

DN 118:90939

TI Recording materials providing high color quality cyan image

IN Iwakura, Ken; Satomura, Masato; Takashima, Masanobu

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04195047	A2	19920715	JP 1990-326216	19901128
PRAI	JP 1990-326216		19901128		

AB The title materials contain, on a support, microcapsules contg. an electron-donating colorless dye(s) which provide hue with a\* from -35 to -45 and b\* from -30 to -45 in the CIE-LAB std. colorimetric system under a fluorescent lamp at color temp. 5500 K is obtained by the coloration with an electron-accepting compd. The materials show good coloring properties and provide high color quality cyan images. Thus, a pressure-sensitive copying set from a color-former sheet using microcapsules contg. I and II and a color-developer sheet using Zn 3,5-bis-.alpha.-methylbenzylsalicylate gave a cyan image (a\* = -43; b\* = -36).

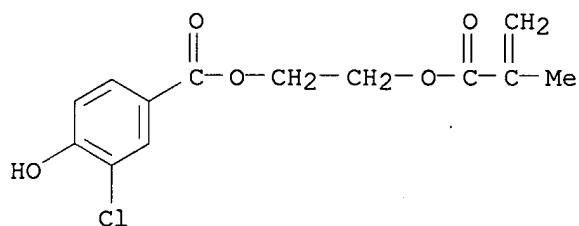
IT **141889-13-6**

RL: USES (Uses)

(color-developer, recording material using)

RN 141889-13-6 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L46 ANSWER 39 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 1993:30124 CAPLUS

DN 118:30124

TI Manufacture of hydroxybenzoic acid having polymerizable groups useful for recording materials

IN Iwakura, Ken; Fukushige, Yuichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04235948	A2	19920825	JP 1991-2131	19910111
	JP 2888454	B2	19990510		
PRAI	JP 1991-2131		19910111		

AB A benzoic acid deriv. I (X, Y = H, OH, Cl-4 alkyl, Cl-4 alkoxy, Ph; Z = hydroxyalkyl) having a OH group is allowed to react with acrylic acid or methacrylic acid halide in an org. solvent using an deoxidizing agent to give II [R = (meth)acryloyloxyalkyl]. Thus, 3-methacryloyloxypropyl 4-hydroxybenzoate was obtained using N-methylpyrrolidone in high yield.

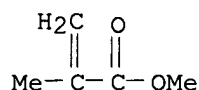
IT **34573-66-5P 118585-28-7P 145073-38-7P**

RL: PREP (Preparation)

(prepn. of, from hydroxyalkyl ester, for recording material)

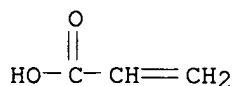
RN 34573-66-5 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester



CM 3

CRN 79-10-7  
CMF C3 H4 O2



L46 ANSWER 19 OF 71 CAPLUS COPYRIGHT 2003 ACS

AN 2001:133863 CAPLUS

DN 134:186003

TI Recording material and photothermographic material with colored layer to be discolored

IN Yabuki, Yoshiharu; Noro, Masaki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 50 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001051371	A2	20010223	JP 1999-222521	19990805
PRAI	JP 1999-222521		19990805		

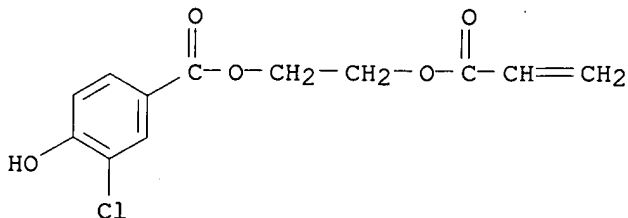
AB The material comprises a support having thereon a de-colorable colored layer contg. (1) a colored compn. comprising an electron-donative org. compd. and an acidic developing agent, and (2) a decoloring agent selected from arom. hydrocarbons, alcs., ethers, ketones, esters, amides, carboxylic acids, bases, and basic precursors. The photothermog. material with a photosensitive layer contg. at least a reducible Ag halide, a photocatalyst, and a reducing agent, has .gtoreq.1 colored layer which is the same as above. The colored layer may be an antihalation layer. Those colored layer shows improved storage stability and decoloring property, providing images with high sharpness.

IT 142177-47-7

RL: DEV (Device component use); USES (Uses)  
(polymerizable color developer; photothermog. material having decolorable colored layer)

RN 142177-47-7 CAPLUS

CN Benzoic acid, 3-chloro-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



L70 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

AN 2002:699500 CAPLUS

DN 137:353580

TI Semifluorinated Aromatic Side-Group Polystyrene-Based Block Copolymers:  
Bulk Structure and Surface Orientation Studies

AU Li, Xuefa; Andruzzi, Luisa; Chiellini, Emo; Galli, Giancarlo; Ober,  
Christopher K.; Hexemer, Alexander; Kramer, Edward J.; Fischer, Daniel A.

CS Department of Materials Science and Engineering, Cornell University,  
Ithaca, NY, 14853, USA

SO Macromolecules (2002), 35(21), 8078-8087

CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB Two families of narrow polydispersity poly(styrene)-based block copolymers bearing side groups contg. both a Ph ring and a para-linked semi-fluorinated side group were designed to produce stable low energy surfaces. The effects of the Ph ring on the surface and bulk structure of the materials were investigated. The semi-fluorinated side chains were found to self-assemble into liq.-cryst. smectic layers within the microphase domains. An unexpected enhancement of surface organization by the arom. group was obsd. The bulk morphol. and the interplay between microphase sepn. and liq. cryst. self-assembly were examd. using transmission electron microscopy and X-ray scattering. Near-edge X-ray absorption fine structure (NEXAFS) studies were used to probe the surface coverage of the fluorinated segments. NEXAFS also allowed the detn. of the orientation parameters (SC-F and S.pi.\*) of the C-F bond and Ph ring of the semi-fluorinated side groups at the surface. On the basis of these data, the orientational coupling between the -CF<sub>2</sub>- helix and the arom. ring was found to depend on the length of the fluorocarbon substituent.

IT 474527-61-2 474527-64-5

RL: PRP (Properties)

(property of semi-fluorinated arom. side-group polystyrene-based block copolymers)

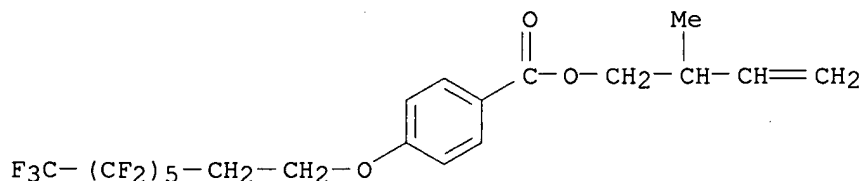
RN 474527-61-2 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-60-1

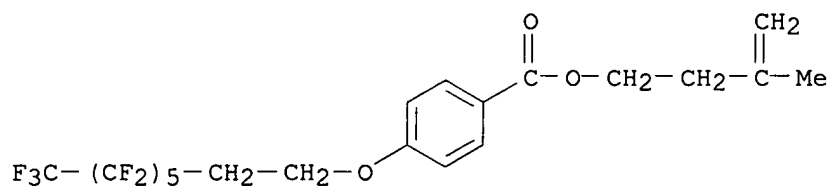
CMF C20 H17 F13 O3



CM 2

CRN 474527-59-8

CMF C20 H17 F13 O3



CM 3

CRN 100-42-5

CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

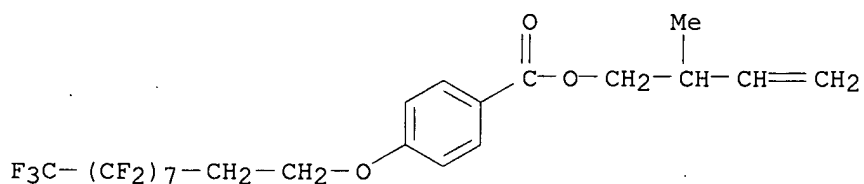
RN 474527-64-5 CAPLUS

CN Benzoic acid, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)oxy]-, 2-methyl-3-butenyl ester, polymer with ethenylbenzene and 3-methyl-3-butenyl 4-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)oxy]benzoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 474527-63-4

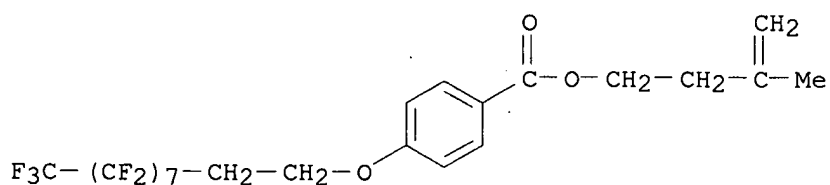
CMF C22 H17 F17 O3



CM 2

CRN 474527-62-3

CMF C22 H17 F17 O3



CM 3

CRN 100-42-5

CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

RE.CNT 28      THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>